



**DELHI UNIVERSITY
LIBRARY**

~~DELHI UNIVERSITY LIBRARY~~

Sl. No. V2.1 : A

HE.2

Ac No. E 1 52

Date of release for loan

This book should be returned on or before the date last stamped below. An overdue charge of 0.6 nP. will be charged for each day the book is kept overtime

**RGVEDIC CULTURE
OF THE
PRE-HISTORIC INDUS
Vol. II**

THE
RGVEDIC CULTURE
OF THE
PRE-HISTORIC INDUS
Vol. II

by
SWAMI SANKARANANDA

With a Foreword by
SWAMI PRATYAGATMANANDA

Formerly Pramathanath Mukherjee, the greatest Tantric Savant of modern India, Author of many Tantric works and a friend and colleague in the Tantric studies, of Sir John Woodroffe alias Arthur Avalon.

RAMAKRISHNA VEDANTA MATH
18^B, RAJA RAJKISSEN STREET, CALCUTTA

FIRST PUBLISHED MAY 1944

All rights reserved by the Author—no part of this book may
be reproduced in any form without permission in writing from
the author, except by a reviewer who wishes to quote brief
passages in connection with a review written for inclusion
in magazine or newspaper.

PUBLISHED BY BRAHMACHARI AMAR CHAITANYA, RAMAKRISHNA VEDANTA
MATH, 19-B, RAJA RAJKISSEN STREET, CALCUTTA, AND PRINTED BY
PRAMATHA NATH MANNA, AT THE SREEKRISHNA PRINTING WORKS,
27-B, GREY STREET, CALCUTTA.

**DEDICATED
TO
HOLY MOTHER**

CONTENTS

				Pages.
Preface	...	...	...	ix
Foreword	...	...	...	xi-lli

CHAPTER I

The Vedas	1-42
-----------	-----	-----	-----	------

Aryas the dwellers of Mohenjo-Daro, 1; Change of the soil, 2; The climatic changes, 3; The exodus, 4; The Sun worship, 5; The Sun as the Soma, 7; The Sun as the Savitri, 8; The Sun as the Gayatri, 9; The five faces of the Sun, 11; The Yupa a Seat of the Sun, 12; The Yupa a symbol of the Sky-tree, 19; The Yupa in Mohenjo-Daro, 18; Worship of the Sun as a bird—The Syena Garugman, 18; The Sun as a snake, 19; The Sun as an Asva, 21; The Asvamedha, 23; A calculation of age by the Asvamedha, 29; The fire worship, 33; Fire, a temporal representative of the Sun, 33; The Soma creeper, 36; The snake as the cloud, 38; Place of women in the Vedic society, 39; Evolution of Vedic deities, 41.

CHAPTER II

The Tantras (the Script)	43-65
--------------------------	-----	-----	-------

Revival of the Brahmanical cult, 43; All embracing Tantric cult, 43; The Tantras revived the Vedic cult, 44; Tantric codes, 45; The division of sound, 45; The Vedic division, 46; Panini's and Musician's division, 47-48; Evolution of Musical notes, 49; Origin of Script, 53; Division of Script into five groups, 54; Scripts of the Deva, Manusya and Rakṣasa, 62, 63.

CHAPTER III.

The Tantras (Script)	66-104
----------------------	-----	-----	--------

Jaipur Script, 68; Egyptian Hieroglyphics 63; Mohenjo-Daro Script, 71; Chinese Script, 73; Cuneiform Script, 75;

Pages.

The Charts, 77-93; Indus Script deciphered, 94-98; Siva-Pasupati Seal deciphered, 99; Jaipur Script deciphered, 100; Cuneiform Script deciphered, 102.

CHAPTER IV

The Tantric Deities and their relation with the
Vedic gods 105-120

The Mahakala Vairava, 106; Dual deities, Diti and Aditi merged into the mother Kali, 107; The Sakti, 108; The five faces of the Sadasya, 110; Eight Murtis of the Sadasya, 111; The Siva Linga, 111; The Satchakra, 113; The Ida, Pingla and Susumna, 113; The Kulakundali, 113; The Yantra, 116; The Mandala, 117; A Temple, 117; Evolution of a Temple, 119; Transformation of the Sky-tree to a Temple passing through the Yupa and the Stupa, 119.

CHAPTER V.

Egyptian Hieroglyphics... 121-124
European scholar's method of decipherement, 121; Partly phonetic and partly idographic, 121; Hieroglyphics are Phonetic according to the Tantras, 122; Charts showing the alphabetic nature of the Hieroglyphics, 123-124.

Conclusion 125-127
The Asva affects the date of the Vedas, 125; Transformation of the imagery tree, 125; Tantric form of the Vedic deities, 126; The Script proved to be of Sanskrit, 126; The civilization was Vedic in origin, 127.

APPENDIX.

Asvamedha	...	...	...	128-134
Index	...	...	...	135-139
Transliteration	...	...	...	140

PREFACE

In the present book, as in the previous volume, the author tries to establish the Vedic origin of the Indus culture. The special feature of the present book is the decipherment of the Indus scripts. The author introduces quite a new system in the decipherment of all the pictographic and alphabetic scripts.

The author cannot express sufficiently his debt of gratitude to Swami Pratyagātmānanda, (formerly Prof. Pranālathānath Mukherjee) the greatest Tantric savant of modern India, a friend and a colleague of late Sir John Woodroffe, for his kindly contributing the *Foreword* of the book.

The author expresses his deep debt of gratitude to the authorities of the 'Āgamānusandhāna Samītī'. It is their laudable enterprise in publishing the Texts of the Tantric dictionaries in one volume that has saved much time and trouble, and helped the author much to illustrate his theory of script.

Sreeman Boren Neogi of *United Society of Arts* has drawn nearly all the figures and charts of the book, and Babu Soroshi Kumar Ray has drawn the Egyptian Heiroglyphics. Their skilful drawings have added much to the value and beauty of the book.

The author expresses his debt of gratitude to Swamis Chitswarupānanda and Sadrupānanda, Babus Balai Chand Roy, Dharendra Nath Roy, Barrister-at-law, Mrinal Kumar Ghosh, M.A., B.L., Pannalal Ghosh, M.A., B.L., and Prof. Ramgopal Chatterjee, M.Sc. and others for their kind help in correcting the manuscript and the proofs.

Buddha Purnimā
Vaisakha 1351 B.S.

SANKARĀNANDA

FOREWORD.

Both the importance and the appeal of the subject, so interestingly and suggestively dealt with in this book, would demand an introduction more thorough and substantial than what I have been able to write here under my present physical infirmities and, I may add,—subjective and objective limitations. Living in a kind of seclusion without the genial, but now commonly unsought, company of books; and receiving practically no new messenger of scholarly information and learned reference, I do not feel either inclined or competent to undertake any literary work of a serious kind. Sometimes I feel like being caught—if I may be permitted to indulge in a personal reverie—in that sublime, elusive ether between the two eternal mysteries of which a former great philosopher wrote—the still starry music of the heaven above and the soft, subdued song and murmured echoing pathos of the stirring but unanswered soul within. The situation does not, indeed, deprive me of the lead of a kind of kindly light now and then ; but I am not sure whether and how far *that* light can give a helpful lead in the historical jungle and in the ideological night in which every track of plodding or flagging research into the subject-matter of this book soon loses itself. Yet the writer of an introduction—even of the nature of a sweeping “air survey” such as the present one—is—should never forget that there is no introduction worth the name where there is no lead of a helpful, dependable kind, especially as regards positions of perplexity and moves of uncertain adventure in any vital front of scientific exploration and cultural consolidation. When the writer of this book came to me with a request that I should write an introduction, I plainly told him this. But he was not to be put off on this or any other plea. So I present him with this rather flexible and general framework, not indeed without a lurking suspicion that this and his elaborate, original handiwork may not readily fit in with each other as regards every detailed ideational design or technical expression, but,

nevertheless, also with a loyal hope that it may prove an adequately spacious and lighted background against which his work—of sufficient intrinsic interest and value as it is—may be exhibited as a picture of even deeper meaning and more general bearing and affiliation.

A vast deal of exploration work—both morphological and historical—has been done in India and outside in relation to the Vedas, and the work itself has created a considerable history, evolved traditions of great erudition and scholarship, and, as is natural with a subject so eludingly distant and so fantastically unfamiliar, has run into allied as well as hostile schools of Vedic query and theory; and that not only in respect of the main facts relevant to the formation of definite conclusions, but also in regard to the point whether *any* conclusions can, as yet, be built upon them. So consolidation work has been relatively poor where exploration and inspection have been rich: Vedic "cosmology"—an understanding of the "universe" in which the Vedic races, cultures and languages evoled—still looks very chaotic by the side of Vedic "morphology", that is, the purely descriptive work pertaining to some of the formal and modal aspects of the Vedic language or languages, customs, manners, etc. Elaborate efforts have been made to reconstruct an objective framework and setting for the Vedic phenomena. But, so far, these efforts have not succeeded in putting together even a fairly consistent and rational, though necessarily incomplete, skeleton of what we may call an objective history of the Vedas.

The historical jungle, inspite of clearings and path-openings here and there, still remains an immense, unmapped unknown, and an inextricable mess of "theories"—guesses and gropings; predilections and prejudices; conjectures and conventions. No rational, scientific method has yet been evolved to survey and reclaim that jungle as a whole. No Indologist can claim that the main historical threads of that ancient, vast space-time tangle were anywhere near having been isolated. The known events have not arranged themselves in any intelligible, continuous "world line". This is, unfortunately, true even as regards the epochal dates of the coming and settling, spreading and

reacting, mixing and assimilating of the Vedic or non-Vedic peoples, their languages, cultures and institutions.

For instance, there is lack of concurrent and coherent—not to say of compelling and convincing—evidence that the Vedic Aryans had actually come from somewhere outside India and settled in a setting and scene, geographical, racial or ethnographical—such as is drawn for them by the orthodox Indologists. The original home is still a melting pot which shows a crystallising centre in Mid-Asia at this moment to be supplanted by another in Scandinavia at the next; and the Aryan origin “bubble” has risen and burst and risen again practically over half the old hemisphere, with occasional freaks to jump across the Atlantic and the Pacific, and even to find a local habitation and name in continents believed to be lost in the depths of oceans. The strange appearance of the ‘Cro-magnon’ biotype and culture in the prehistoric European theatre has tickled fancies and roused imaginations in the wondering investigator; and some have actually traced that puzzlingly interesting and amazingly evolved biotype to a continent lost in the Atlantic of which even Plato had heard and written stories. The Egyptian mummification and pyramid-making have likewise been assigned uncanny, and perhaps unlocatable, sources.⁵ The origin of the Vedic peoples and of the Vedas has coaxed fancies and cajoled imaginations to a degree even unsurpassed in the Atlantis or Lemuria story-writting. Preconceived notions have essayed to build upon uncertain foundations and with fluid, untested materials; criticism has, often unconsciously, followed the surreptitious lead of the obsession complex; research has seldom entirely disengaged itself from the octopus of bias *pro* or *anti*. The result is that even official Indology in this and many another vital matter, has lacked a thorough scientific outlook and theory.

So it is well to bear in mind that there is no Jerusalem or Mecca of the original home of the Vedic peoples to which all votaries must turn as devout, unquestioning pilgrims. If Tilak was not an outlaw in assigning an Arctic home for the Vedic Rsis, neither can a modern investigator be branded a heretic for seeking that original home in the land

of the Sapta-Sindhu. In fact a part of India itself—the greater India of bygone ages if need be—may be that original home, all the available mass of evidence and quasi-evidence purporting to support Aryan migration or waves of migration from outside India notwithstanding.⁵ The available evidence is incomplete and inconclusive, and it may yet fail to pass a crucial test. A new crucial test—the discovery of a new fact or *ensemble* of facts for instance—always hangs like the proverbial sword of Damocles over any hypothesis firmly held and assiduously promulgated.

The discovery of the Indus Valley civilization in recent times has, to take one of the great surprises in undiscovered human history, burst like an unsuspected mine to blow up the old planning and structure of Indian history. Orthodox history is just emerging from the colossal ruins, and from an instinct of self preservation, if from no other impulse, is seeking to build for itself a new theory shelter and a new convention zone by a complete segregation of the Vedic and the Indus Valley civilizations with a gulf yawning into millenniums between them, and with somewhat hastily improvised racial, ethnic, linguistic 'Maginot line frontiers'. But 'Maginot lines' may prove unsafe and undependable here as elsewhere, and even scientific frontiers are probability frontiers with wave pictures showing points of alternate condensation and attenuation, or a height of practical certainty at this moment followed by a hollow of abysmal improbability at the next.

For instance, the view so long held with comfortable assurance that the Aryan had come into an India inhabited by aborigines having little or no civilization was definitely abandoned sometime ago when the almost providential discovery of the Indus Valley brought to light a pattern of culture in some respects even more elaborate than what is apparent or is commonly believed to be so in a surface review of the Vedas. The aborigines have not indeed altogether vanished from the picture; but the probability amounting to practical certainty now is that at the time of the Aryan advent India might have been predominantly dark in colour, but, within certain regional bounds, was not so black in the thickest

dye of barbarism as the archaeological gallery pictures commonly show. In fact, the internal evidence of the Vedas themselves had never warranted the kind of black and dark aboriginal hypothesis held with such tenacity by generations of Orientalists. The Vedic references to the highly elaborated social and cultural patterns, the admittedly superior and often unassailable devices and engines of offence and defence of the 'Dasyus' and 'Râksasas' etc. against which the Vedic Aryans frequently invoke the kind intervention of their gods—provided an overwhelming weight of evidence against the spectre of black aboriginal theory that had grown into a high convention, if not a first article of faith, with many Indologists. Consistently with that convention which brooked no heresy, one would naturally seek to explain away rather than understand and correctly evaluate the high references in the Vedas to the valour and culture, skill and technique (often of the nature of magic and witchcraft—cf. Mâyâvin, Yâtuchâne etc.; note also the 'counteract', antidotal magic in the Veda itself, especially, Atharva-Veda) of some of the non-Aryan adversaries, by an impatient and over-insistent hypothesis of poetical fancifulness or exaggeration. These, like the hymns to their gods themselves, were in that hypothesis looked upon as poetry, and so were, in the main, creations of the *furor poeticus* working upon a kernel of fear-superstition-superiority complex, and therefore, never actually meant what they said or depicted.

The discovery of the Indus Valley civilization has carried the official beginnings of the Indian history at least two millenniums back, and whilst in this very remote history many ancient affinities and affiliations, both racial and cultural, have been recognised, inferentially or otherwise, with other old civilizations outside the borders of India, the gulf before referred to between the Indus Valley India and Vedic India has probably tended to yawn wider, and it seems to be already a high convention with the majority of historians and archaeologists to maintain that the two are separated not only by a long unscheduled interval of time, but by a very marked racial and cultural hiatus. The Indus Valley is, according to this new convention, pre-Aryan, and pre-Vedic. It was the fading glory of that pre-Vedic

civilization which the Aryah probably saw when he set his foot on the Indian soil, and it was with the last resistance of a dying aboriginal Might that he had to come to grips.

The rational historical approach to the Indus Valley discovery should not be from any prepared base of theory and convention, however widely and highly held, but from a carefully collected and tested mass of material or data, mainly documentary as it seems, on the Vedic Aryan side, to be brought into comparison with the excavated material or data, mainly structural, epigraphical and formal at Mahenjo-daro and Harappa. And then the one should be, if possible, correlated to the other. Presentation of the available material or data from either side is the first step ; this should be followed by examination and comparison ; and last of all, correlation or co-ordination of one to the other, if and to whatever extent possible. A revolutionary discovery like the Indus Valley should have been suffered to develop its own outlines and show its natural affinities to past or future epochs without the inspired lead of any official theory, and outside and independent of the framework of any accepted convention formula. One may, for instance, yet venture to hope that the two-pattern and two-framework theory as regards the Indus "Valley and" Vedic Saptasindhu may be revised and at least partially abandoned, in favour of a much wider unitary space-time frame-work and a correlated and co-ordinated bio-typal and ethnic co-pattern. All the relevant issues relating to framework and pattern should be opened *de novo*, and it is well to bear in mind that the racial, cultural and linguistic dualism and discrepancy so largely patronised may, apart from and prior to a closer theory-free examination, have rested on a *prima facie* case only, which an impartial and competent future tribunal may finally turn down as being not merely doubtfully unproved with a verdict of *nihil ad rem*, but as being definitely disproved—*reductio ad absurdum*.

The analogous case—also a revolutionary one—in the recent history of physical science should have served as a warning and indication. Near the close of the nineteenth century, the discovery of "radianc matter" and "radio-activity" unsettled many a settled fact and demolished many a rock-bottom conclusion and razed many a

sky-scraper convention. It gave us an' unitary and evolutionary picture of the elements of matter, their workings, correlations and properties, as Darwin's theory had done in the domain of living forms before. Missing links and abnormalities still persist in the evolutionary tree of life, and many a re-adjustment both as to the general theory and logical arrangement of the data has had subsequently to be made to straighten out some obstinate bents or dents in the searching mind and some persistent loops or leaps in the ever-widening path to a fuller integration of living phenomena and forms. In the realm of general physics including Astro-physics, again, the introduction of Relativity ideas, both special and general, and of Quantum Mechanics including the New Wave-conception, has now succeeded in integrating the relevant phenomena to a such remarkable degree that the whole of the physical universe can be seen and enjoyed today as an almost perfected pattern of harmony of a kind which only the soul of pure Mathematics ever ventured to visualize in its most ecstatic dreams. In psychology, sociology and economic reconstruction of history also, the tendency has steadily grown towards integration and synthesis and away from disintegration—from rigid rings of separation and unbridged breaches of isolation.

In the narrower history of human races, cultures and languages, the same tendency has not yet emerged with equal initial momentum from the deadweight of outgrown habits of wilful or wishful thinking. A disintegrationist rule and a separatist and isolationist formula yet come more ready and handy with the orthodox archaeologist and historian when he sets about exploring the seeming missing links and exhibiting the apparent divergences in the human space-time continuum. That human space-time continuum, be it as quietly and serenely as possible noted, is not a mere symbolic transference of the Relativity epithet; it is actually a specification in new terms of the general continuum itself, so that events co-exist and follow one another in the human continuum and make human geography and human history in accordance with a scheme and pattern fundamentally similar to that of the cosmic continuum. This universal background of cosmic events with its basic scheme and

pattern—which in Relativity Physics assumes the form of a certain kind of non-Euclidean Geometry—is no metaphysical nicety and futility fad for the common field archaeologist or the average armchair historian. It is upon this background and within this framework that he must develop,—exhibit and move his pictures to give them a meaning that means to be more than momentary, fragmentary or illusory. The history that essays to reconstruct by piecing together bits and scraps of information without the support and import the general background provides, either succumbs to an innate theorising temptation and becomes what one may call manufactured history of a special trade mark, or is dismayed and carried away by the apparently irrational march of events and tossed in the seemingly arbitrary cross-currents of diverse movements and tendencies. In this latter case again, one may find oneself at last dashed ashore against a rocky wilderness of so-called proximate dates and probable data which now enclose a serbonian bog where armies whole of conflicting and confounding theories have sunk, and now disclose an arid desert of scattered flints of facts in which every living interest is dead and from which the very soul of meaning and method has fled.

The philosophical background will serve a two-fold purpose. It will suggest and evolve the outlines of an integral human history—a space-time continuum in which the *elan vital* of the human species evolves with all its varied wealth and grandeur of races, languages, institutions and cultures, and within this general evolutionary picture, it will inspire us with the kind of understanding sympathy—so readily solvent of the besetting ill of the superiority-inferiority-chauvinistic complex—that is a *sine qua non* for a delicate delineation of the inside patterns of ancient human expressions and a bold communion with the spirit of ancient institutional forms.

For example, one of the vital issues that arises when we place the Indus Valley picture by the side of the Vedic picture is this: Do they reveal the same bio-type or allied, or slightly variant or widely divergent? This will require not merely a searching morphological scrutiny but an examination upon the deeper principles of what we may call evolutionary anthropology—a science competent

to trace also the intrinsic variations of a given bio-type which come from or go to the germ-cell of that bio-type and are, therefore, transmitted, and eventually, produce an allied or variant or even divergent bio-type.

Sir Arthur Keith and other modern workers in the field have not forgotten the "mysterious gland laboratory"—the little ductless cellular workshops—in the human body, which by an almost undetectable interference with the chemistry of bodily circulation and metabolism of the tissues makes a dwarf or giant stature, stupefies or stimulates brilliance, or works such other physical or mental wonders. So that if we find two or more bio-types, living or dead, in a certain region, different from one another, the only legitimate hypothesis is not this that they are types different in origin which are either incidental to the same region like different species of plants and animals having a common habitat, or else, they have been thrown together in the same region by some historical accident. This, in other words, raises not merely the issue whether they, being originally divergent forms, are indigenous or immigrant.

This, evidently, does not preclude another and a momentous possibility : they may be—unless the case is barred by an absolute contrary limitation—originally the same bio-type in which intrinsic variations of the kind above referred to have subsequently wrought changes so material that they can now well be regarded as divergent types. The lesson of the modern views of evolution—in which "mutation", "elan vital" and "emergence" appear in the principal rôle—should not be lost upon us ; as also the inspiration of the wonder workshop of the ductless glands of which we have spoken. These new ideas of mutation, emergence and gland-control metabolism provide an altogether changed frame-work for anthropological and historical race-designs or sketches. Unlike the older ideas the new may not require vast geological ages for the transmutation of types ; this may be possible even within the compass of short or medium historical or pre-historical periods.

The time measure of the antiquity of man is a pendulum that still swings between two very wide limits. But starting with the Java, Peking or Neanderthal man—in whom

the dividing line between the ape-man and the man-ape is with difficulty discernible—we have, practically within the compass of a single—and that the latest geological period,—an apparently well-packed history of the evolution of the human type which, inspite of the admitted lacunae and inadequacy of geological records &nd other data furnishing evidence sufficient unto the purpose, either for or against a unilateral or multi-lateral theory of human origin and progress, shows, nevertheless, a very remarkable phenomenon, viz., a presumably sudden appearance on the scene of especially evolved bio-types such as the Cro-magnon—a caveman and hunter apparently, who still lives within the framework of a primitive palaeolithic culture but with a brain capacity and physique formation zenith high above the prevailing or preceeding level-average, and with an artistic scene so vivid and in such refreshing and revealing sympathy with all the living nature around that he is, verily, even to-day, looked upon as a pre-historic puzzle and archaeological wonder. Was he in the direct line from the Neanderthal or some other primitive man of a like pattern, or was he in an altogether different line from a stock now missing? The latter is the more probable presumption; yet the former is not quite ruled out. For, mutation and emergence of a changed bio-type from a given stock, presumably by an intrinsic alteration of the "chromosome number" (like the atomic number in Physical Chemistry), is not only a possible but probable happening. Such intrinsic alteration of the chromosome number and therefore of the constituent "gene" elements which are believed to be the specific character-bearers, is proved both by observation and experiment, as the transmutation of a chemical atom is proved by the observation of spontaneous radio-activity, and is, also, experimentally indicated in the latest laboratory results. In fact, all profound changes in the living kingdom are now generally believed to be due to such inner "cataclysms" rather than to a composition of slow and almost imperceptible changes continued through long ages. The physical and mental characters which differentiate one human bio-type from another have emerged and often emerged *per saltum*, (cf. the jumping of the electron in its orbit, the little but definite jumps of energy which

make *quanta* and the like) presumably on the occasion of the human history having had "to turn a corner". Such a need and such an event is not merely the consequence but the occasion of dynamic change in the vital apparatus.

The basic mechanism of such new and "critical" characters is not now understood, though today we have a deeper insight into some of the basic features of the germ-cell and its metabolism, and in the practical, productive side of Eugenics at least, have a better control of the components in the mixing of types. Some minds gravitate to a physical foundation for all phenomena; but they have not yet been anywhere near touching it. Nay, the newest and surest likelihood now is that they may never touch it. Other minds soar to a super-physical or even supramental altitude, and seek to explain the emergence of progressive types by a theory of "informing" Descent rather than of "conforming" Ascent. In other words, to these latter minds the environmental changes and the adaptive system-reactions alone do not go to the heart of the riddle of life manifestations. The emergence of each new type—that is, every critical variation in the germ-cell—is an "unique event", an "original act", a "special creation". The philosopher Henri Bergson and quite a host of competent workers in the field have with light and profit laboured and their labours have cleared away the mechanistic excrescences of former habits of thought, and bought to a more realistic light and placed in a more natural perspective the essential facts of vital history. In that light and in that perspective we see—leaving aside the sophistinating glasses of any super-imposed hypothesis—that when a new bio-type, Mediterranean, Alpine or any other, makes his entrance on the stage of history, the green room curtain behind which admits him is unceremoniously rung down immediately after, leaving the prehistory or protohistory gallery perpetually wondering and perplexed. The exit, too, is often likewise perplexing. Wonder, no doubt, does and should inspire enquiry and stimulate research. But enquiry must never exceed the conditions of its own contract, and research should never over-reach its own legitimate ends or reasonable possibilities.

* These general observations in the introduction are called for for

several weighty reasons some of which may explain themselves as we proceed. In the comparison and in the affiliation or disaffiliation of given bio-types such as the Indus Valley specimen and the Vedic Aryan—supposing they are materially and adequately available for comparison—the cephalic, nasal and other usual indices must, no doubt, be taken into account, severally as well as totally, and from a judicious comparing of notes a presumption may be permitted to arise as to their original affinity and subsequent divergence, or conversely, original divergence and subsequent mixing and alliance, or else, bilateral origin and career all along the line.

Such presumption might seek and find corroboration from inscriptive, linguistic, ethnic, scriptural, traditional or even mythological evidence, either internal or external or both. These kinds of evidence, of more or less uncertain and therefore disputed validity, if, and in so far as, they can also be made to co-inhere and brought convergently to bear upon the point at issue, may enhance the probative value of the presumption raised independently by an anthropological examination, and may even make out a *prima facie* case. But it will not do to forget that a *prima facie* case is not a case that is decided and *decreed*. On the contrary, it is a case that looks like being fit for taking into further consideration, demanding and awaiting a thorough searching, sifting and testing. And the thoroughness must pertain to the entire ascending and descending scale of evidence starting with the anthropological and ending with the traditional and mythological.

Not only that ; it should extend to what we may call the *ultra* and *infra* regions of the common scale. The picture should not only be laid but drawn anew on a larger canvas—on a realistic, imaginative, intuitive, philosophical background. By "imagination" and "intuition" are here meant the mystic sides of the scientific or historical mind *en rapport* with the deeper truths, rhythms and harmonies in nature and history, which observations and experiments may have timidly and dimly suggested but not clearly revealed, and which bio-metric measurements, inscriptions, seals, coins, scripts and annals may have shyly and hesitatingly hinted at

but not squarely faced and calmly recognized. Nearly all epochal discoveries, in principle or in fact, in science, and you may add in history also, have had their origin in such intuition and inspiration, which we may sometimes familiarly call and quietly dismiss as good luck, happy coincidence, favourable accident, and so on.

Now, in my judgment, it was a lucid realistic intuition of a like nature that revealed to the author, Swâmi Sankarânanda, the connecting veins underlying the massive official bandages isolating the Vedic and Indus Valley civilizations. The learned and able Preface-writer of his former book, Dr. B. N. Datta, used his scientific knowledge and technical skill to much advantage, as I think, in an attempt at reducing the hiatus between the two time-eaten and theory-worn historic patterns and two blurred, bias-blasted age expressions. The burial rites of the two cultures, for example, justly merit and have in that Preface received a fair measure of attention. The present book discusses the historical hiatus and the ideological antipathy that scholarly and critical convention has so long allowed to stand and set in granite hardness between the Vedic and the Tantric cults, specially as regards the corresponding deities, the modes and means of worship and the technique of realisation. The writer's approach to the subject is, mainly, historical and formal no doubt, but here again as in his previous book, he has been led to the right spot to dig into for running veins of a "mother-stuff" or a common substance by what we may call a kindly inner light. That light has proved to be his "divining rod." His Indian phylogeny and, if I may also add, the mystic sympathies of the Order to which he has the proud privilege to belong, have borne along within his reach the wisdom of the Rsis that has uttered the "open sesame" mantram for effecting an entrance into that ancient cave of immortal buried treasures. Yet his method of investigating the data and arriving at conclusions has been, mainly, inductive and critical, as it should be with any competent, conscientious historian. The intuition or inspiration as in the case of the exact sciences may suggest the line of right approach to the heart of a problem and show, as it were in a flash, the real occasion and

place when and where facts are to show their identity card and processes to disclose their endorsed passport and booked destination. But whilst such an inner or upper lead should be admitted as being essential, in the matter of an uncommonly complicated theme for an adequate understanding of its inner or upper implications and correlations, it can never, under ordinary circumstances, be allowed to supersede the empirical method of information and induction, comparison and criticism.

I welcome, therefore, the informative and inductive original work of this author and of others who, like him, are delving deep and wide for a broader foundation for the Vedic and the Indus Valley civilizations, Vedic and Tantric cults, and similar other high-authoritative dogmatic dualisms. It is my earnest hope that an integral, synthetic Indian history may slowly emerge and develop its main outlines and essential features from the present seething mass of antitheses and antipathies, anachronisms and anomalies. The Indus Valley and the Vedic may constitute a continuous cultural or even racial pattern—maybe without being contiguous and concurrent in space-time. And we may add that there are no compelling reasons, actually present or prospective, for denying their contiguity —~~or~~ concurrence in space-time either. For instance, it is not an inescapable position to maintain that Vedic Aryans must have come from an unknown home outside India and entered the Punjab not earlier than 2,000 B.C. Both the "home outside" and the date demarcation theses have, for sometime past, shown a tendency to turn into a rigid convention with many Orientalists, though as regards both, there still subsist substantial reasons, astronomical, geological and ideological amongst others, not only to make such projected outlines elastic and plotted specifications problematical, but make at least some of them quite arbitrary and untenable.

It may be a more consistent and co-ordinating hypothesis to believe that the Aryan culture-pattern, if not a corresponding and generally uniform Aryan bio-type also, was a genus or family rather than a species or variety, and that this family had and still has far wider ramifications in that special space-time

continuum which is human history, and evolved into far richer expressions than one is commonly prepared to concede. For instance, that family may have older, deeper and wider affinities in the line of direct descent or in alliance or contact. The prolific growth of the Aryan family of languages, customs, mythologies has long been recognised ; although inferences and interpretations based or supposed to be based there-upon have been, in some vital matters, unwarranted and unjustified.

For an integral picture of Indian history we have to spread the canvas—a fresh and clean one if possible—more courageously and generously than we have been accustomed to do since the day Sanskrit was “discovered”, or even since the day the invention of epigraphy, bio-metry and so forth introduced a new and powerful calculus for computing involved and disputed human phenomena.

As modern civilization has, specially during the last two centuries, evolved a fairly uniform pattern and picture spread over the greater part of the globe with a varied distribution of its characteristic values showing ‘eminence’ of high civilization in some regions and ‘depression’ in others, and as also this difference in distribution has created a difference in the ‘potential level’ inducing pressures and tensions and necessitating a flow from high potential to low, resulting in all sorts of racial and cultural, economic and political reactions and repercussions ; so we may, with good reasons, imagine that the Aryan pattern and picture was, as in some respects it still is, the dominant world-frame or Idea with a chequered distribution of its characteristic values, and therefore, with a ceaseless pressure and tension, commerce and bargain, between its higher and lower levels. And the values, be it remembered in passing, were and are not always dominantly moral and cultural values ; and the higher and lower levels did and do not always mean superiority or inferiority in point of civilization as it was or is understood.

That evolving Idea might not have been the monopoly of a single bio-type or even of a group of allied bio-types. Ostensibly dissimilar bio-types might have been co-partners of a common contract and co-members of a common family, which, as a culture pattern, though presumably not as a race-type, we call the

Aryan prototype. Compare again the modern civilization : it is now shared in common, though unequally, by a variety of race types, each with a variant in language and script, in laws, customs and morals, and in constitutions and institutions. These variants, more pronounced in one member than in another, do not obscure the invariant common character which is dominant. As again now, the ancient dominant pattern might have had associated with it an Aryan Race-axis also which, without excluding different bio-types and races from sharing the common pattern, imparted a more or less dominant racial colour and character to the evolved integrated picture. In other words, the Aryan Race-Axis—and one must have been there—did not exclude racial intermixing and cultural partnership, but was, nevertheless, a dominant colour co-efficient and a forceful character-factor. In a narrower sense this was often regarded as the *Ārya*. In a wider and generally accepted sense, the colour bar nearly vanished and the racial character-factor was not insisted upon.

In India, after Aryanisation for instance, the North and the South retain to a marked degree their colour and racial character differences as also their linguistic and other variants, and though the name *Āryāvarta* was specially applied to the northern parts, the South—excluding of course patches here and there of aboriginal primitiveness—and such “dark” patches persisted and still persist in the North also—was steeped so thoroughly in Aryan culture that it bore and still bears an Aryan (as regards cultural pattern) character even purer and stouter in some respects than that of the North from where the spreading waves of Aryanisation are supposed to have started, but which, lying nearer and being more vulnerable to foreign impacts and penetrations, was not so secludedly and securely situated. Culturally speaking, therefore, the later convert has remained a stancher follower of the gospel than the proselytising evangelist. We say this on the assumption usually held fast to almost as a first axiom in ancient Indian history that the Dravidian and the Vedic Aryan were originally two patterns which, previous to their contact and cultural assimilation, had

been separated from each other by a very big space-time hiatus. But is it an assumption so well-grounded as to be unshaken and unshakable?

Why should we not rather spread the canvas more widely in space-time and imagine that what we commonly and somewhat arbitrarily circumscribe as the race-type and culture of the Vedic people or peoples, are only a cross-section, a prepared specimen, from a larger integral pattern of an im-memorial as well as modern human history, in the varied contour and curvature of which, embracing such wide vistas of space and time, the culture and civilization as manifest in the Rg-Veda for instance represent only a peak of special prominence and purity from which, as a base and centre, wave-trains of racial, linguistic and cultural influence must have spread far and wide, and established contacts with movements from other operating centres either in the same system or in parallel? The dynamics of history, then, resolves itself into compositions and interferences of such wave-trains.

According to this conception, civilization and culture, both ancient and modern, in the fundamentals, have a unity of pattern in the midst of all the diversities of it rendering, as science, old or new, may be conceived to have. The Rg-Veda called it R̄tam (ऋतम्)-Satyam (सत्यम्) which crystallised as the idea of Soma (सूक्ष्म) or Yajña (यज्ञ) or Sacrifice, and, later, as the idea of Dharma (धर्म) or Law. But this essential human Dharma (धर्म) evolved, as one may presume, not in one but in many parallel wave-trains of human aspiration and endeavour. There was, and there still is, an Aryan System of dynamic human history with space-time pictures of historic events, which were and are in conformity with a distinctive Aryan pattern—not necessarily racial, but certainly cultural. That common, congruent pattern we may, in one word, call the Soma Pattern ('सूक्ष्म-साक्ष'). (Compare the derivative meaning of साक्ष as given in the Brhadāraṇyaka Up. for instance.)

The word *Soma* (सूक्ष्म) or *Soman* is commonly associated with the intoxicating juice of a certain unidentified plant apparently much in favour with the Vedic Aryans. But here,

as elsewhere, we must strike deeper for a richer and truer vein. It is the epiphany as well as epitome of the whole, distinctive Aryan Idea or System. As I have worked at it in other books or lectures, I do not pursue the point here. But one point of special interest may be noted in passing as showing, symbolically and figuratively at least, if not also dynamically, the line of demarcation and divergence between the ancient and the modern types of the Aryan System. Like a seed of gram, *Soma* holds within itself a dual basic structure and, we may add, a duality of basic functions. We may call them out-going (efferent) and in-going (afferent), outward and inward, objective and subjective, *minus* and *plus*. The structure of the wordsound itself shows this: *Sa* (outward) + *Um* or *S* + *Om* (inward). Note the breath going out and drawn in again in the two elements. This breathing out and breathing in is a rhythm that was believed to be fundamental in Nature, outer and inner, in macrocosm and microcosm. In the living body, for example, they are anabolism and katabolism. Somewhere they are manifest as repulsion and attraction; propulsion and impulsion; projection and absorption. In the mind for example again, as sense-ward movement and thought-ward : "as impression and reflection, Or, sometimes, as passion (*Pravrtti*) and peace (*Nivrtti*). Often spoken of as the Sun and the Moon; Pingalâ and Idâ, So on and so forth. The whole mystic science—and truly science of another kind it was—of the Vedic and Tantrik cults and practices rested upon the recognition of the basic rhythm involved in *Soma*: the two cults were, as it were, the two wings of the same mystic Bird—Himsah (ହିମ୍ବ) or Haumsah (ହାଁମ୍ବ). Himsah—the Celestial Swan—the Sun=Cosmic Prâna.

We are coming to this aspect of the matter presently; but be it noted now that the departure and divergence from the *Soma* (root 'Su') or *Homa* (root 'Hu') type of the ancient Aryan culture-system started from an originally latent but afterwards patent splitting up and dissociation of the two *Vijas* (Seed elements) *S* or *H* and *Om*—held together in unison in *Soma* or *Homa*. These latter represent a fundamental Rhythm or Harmony system

with which the modern "wave-system" "conception of the electron, for example, may be, as regards some aspects, compared ; though the former, it should be noted, refers to the plane of *Prâna*, and not primarily to the non-Euclidean nowhere or everywhere where the speculations of Physical Science have now landed us. *Prâna* is not life or vitality as it is generally understood in Biology : it is rather akin to the *élan vital* of Philosophy. Yet it is not something that excludes the 'material basis'—whatever that is—of the physical world ; or the 'spiritual basis'—whatever that is—of the sentient. But of this later on.

Now mainly with a view to forming an idea of the morphology of the evolutes of this *Prâna* and their essential correlation, let us conceive that a fissure, at first imperceptible, appears within this *Prânik* Rhythm-Body, due to the accelerated working of a differential stress producing accelerated strains in the two "halves". As the result of this, the *S* is not only dissociated from *Om*, but each is strained, and strained progressively, so as to become and function as two independent, and in some respects, as two polar and opposite bodies. In other words, each becomes a *Prânik* Rhythm-system by itself, and their relation, after such dissociation, may be, in some respects, antithetical. The principal strained forms of *S* are : Š (শ) Ŝ (ষ), S (স) and H (ষ)-each with a *Visarga* (projective momentum) ; of these four, S and H represent two polar critical strains—the two limital positions between which this special pattern of *Prânik* Energy "oscillates" or "undulates". The principal strained forms of *Om* are *Am*, *Im*, *Um*, *Aim*, each with an *anunâsika* (nasal) associate, with an *infra* critical limit in A, and an *ultra* limit in H, the first and the last of the Varnas. A and Ha are the two limits of the amplitude of the whole *Prânik* oscillation covering the *Varnamâlâ* (বর্ণমালা).

In the original Vedic-Tantric culture-system, for example,—and we consider them as fundamentally and essentially unitary and harmonic,—the two components—afflent and efferent as they may be called—are in balance and work in unison. We have in that case the whole and an harmonised whole. But owing to the working of a subtle differential stress, that whole is disintegrated resulting in an *S*-nucleated and an *Um*-nucleated

"Body." Analogous is cell-division : by which from an unitary cell with a single nucleus we get two independent cells, each with its own nucleus, which, in some cases, may be polar or complementary in character.

Now as an illustration we may say this that the modern Aryan culture and civilization system is an "S-nucleated system," whilst in the post-Vedic Indian and some other Eastern and mediæval Western evolutions, another system or Pattern, *viz.*, *um*-nucleated prevailed. Or, to borrow the language of Mendelism, we may say that in the former the *S*-factor (and all it implies) has been dominant, and the *um*-factor recessive ; but in the latter the reverse.

Again, the four *Varnas* (letters)—(Ś, Ś, S, H) form a special Prānik sub-system—*uṣmāṇah* as they have been called in Pāṇini. These are the "winded" (*Vāyu-Pradhāna*) group. They are also Mahāprāṇa (commonly translated as Aspirated). All this implies a high kinetic-energy level : puissant and passionate ; projective and prospective ; propelling and progressing. The mouth and the machine have a dominant sibilant key-note ; senses and muscles have a tendency to mount to sensory-motor curve-precipices ; the heart and the brain are attuned to a powerful rhythm-pitch of aspiration, essay and endeavour.

The four *varnas* will form, and have in actual history formed, four "polar triangles" with each *varna* as an apex and the other three, as one may represent them, as the three sides. Such a disposition of the elements will mean this : Not only that a particular type or pattern of race-culture-civilisation comes to evolve a special dynamic picture represented by an appropriate sound-equivalent (*Vīja mantra*—वीजमन्त्र), but also by an appropriate power diagram (*Mūla yantra*—मूलयन्त्र). And the two are the two faces of the same basic fact of correspondence, correlation, congruence (*Tantra*—तन्त्र). We cannot study here, even in general characters and in outline history, any of the four sub-patterns above referred to. It will be, for that purpose, necessary to differentiate the four *Mahāprāṇas* first and then to integrate them in the manner we have indicated. Two fundamental postures are : S-apexed and H-apexed. Now, H is "*ghosavat*" (vocal),

while the other three are "aghosa" (non-vocal). We may understand this as meaning dominant and recessive respectively. So that when we have a polar triangle S-apexed, we have an S-dominant type with implied characteristics and tendencies. But even in this case we do not have a single or simple triangle : we have a reversed H-apexed triangle associated with it, the three sides of the one intersecting the three sides of the other. Not only so : the reverse triangle has a tendency—and this can in some measure be understood and explained—to reverse itself and become the direct triangle, and the direct triangle has a tendency to reverse itself and become the reverse one. The reversing movement in the one sense or in the opposite constitutes an "epoch" of history, individual or collective.

We have here alluded to the triangular pattern ; but there are others : Pentagonal, Sexa or Hexagonal, Septa or Heptagonal, Octagonal, and so on. The old Sāṃkhyan or Pythagorean idea of the fundamentality of number and magnitude, and therefore, of rhythms and harmonies in the constitution and working of Nature is now well-attested : modern Physics has jettisoned practically the whole mechanistic load of the nineteenth century and cleared the decks for a full-dress Neo-Platonic debate—the reasonings of Pure Mathematics (*i. e.* pure space-time relations).

The curves and nodes of human history present a complexity of data such as will deter a bold descriptive formula or a delicate explaining equation. Nevertheless, a formula does exist to describe and comprehend, and an equation to govern and explain. These, from the fundamental *Prāṇik* point of view, are : the *Vija-Mantra* (power-picture as sound) and the *Mūla-Yantra* (diagrammatic power-picture). And the congruence of the one with the other and with the whole *Prāṇik* Harmony-system is Ādi-Tantra (correlational power-picture).

We have in very general terms spoken of the nature of *Vija Mantra* and *Mūla Yantra* of the modern Aryan Prāṇik system and of the same system in the ancient days. Both are the dismembered elements or 'partials', elements stressed and strained, and somewhat independently nucleated and evolved, of a basic

Soma Pattern (सोम-साम). "This latter we may call the original Aryan Vital Impetus or Urge.'

In India and in some other countries the '*Um̄*'-nucleated partial was, in later times, stressed, strained and evolved—implying a gradually diminishing projective and propelling kinetic value or energy level, but more impelling and puissant, as one may think, in the introspective way, along the ascending axis of the Prāṇamaya, Manomaya, Vijnānamaya and Ānandamaya Koṣas as they are called in the Upaniṣads.

The Primus is *Prakṛti* and the strained evolute or variant *Vikṛti*. The Prāṇik distinction between the two contrasted partials of the Aryan Urge may, accordingly, be represented by 'Soma'-Vikṛitis—one with greater stress weight on the evolutes of the 'SH' (श) function and the other on the vowel variants (vikṛitis) of 'Om'. The 'SH' function is also met with in the Vedas in the forms—*Svāhā* (स्वाहा), *Svadhā* (स्वधा), *Svasti* (स्वस्ति), *Vasat* (वषट्) etc. In the Tantra the 'SH'-function has also variously evolved particularly as (शः), *Soharṣ* (सोहर्ष), *Shau* (शौ), *Hsau* (हौ), *Haupsah* (हौप्सः) etc. Reference may also be made passingly to the two distinctive "groupings" in the Tantra, called *Kādi* and *Hādi*.

Of the *Svāhā* (स्वाहा) group the first two incorporate the long, expansive variant of the vowel 'A' (अ), and the third and fourth the short contracted form. The vowels are the primary "Sound Bodies" of the Vital Impetus of Prāṇa (प्राण). And they can be arranged in a triangular pattern first of all—and that pattern in Vedic terms is that of [‘Bhūḥ’ (भूः), ‘Bhuvah’ (भुवः), ‘Suvah’ (सुवः)] They are the mystic combination—‘*Agni*’ (अग्निः), ‘*Soma*’ (सोम) and *Sūrya* (सूर्यः)—words that bore deep meanings and should not be loosely translated as fire, the moon and the sun, though these objects in nature were, and may be, taken as symbols and embodiments of fundamental Prāṇik manifestations. As a *chakra* (चक्र) or wheel—so much pressed into service in ancient Vedic and Tāntric symbolism and ritual—has three essential parts—*nābhi* (नाभिः) or centre, ‘*ara*’ (अरा) or spokes, and ‘*nemi*’ (नेमि) or circumference, so ‘Prāṇa’ (प्राण) manifested as the expanding and contracting Cosmic Sphere (compare the analogous, illustrative modern conception of Curved Space and Expanding Universe)

was known to have a corresponding three-fold manifestation as the "Sun" or नाभि (the Nābhī—नाभि or Viṣa—विष), as the "Moon" or Śoma (सोम) (the अर 'Ara' or 'Retah' रेतः), and as "Fire" or Agni [the 'Nemi' नैमि or Sarga (सर्ग)]. They are, respectively, the Prāṇik Source (*Suvah*—सुषः), the ordered lines of Prāṇik Radiation (*Bhuvah*—भुषः) and their "atomic" as well as mass projections as the manifested Cosmic Sphere (*Bhuvanachakra*—भुवनचक्र). This last is 'Bhūḥ' (भूः). Sometimes these three basic Cosmic Principles (*Tattva*) are spoken of as *Dyavā-Pr̥thivi* (द्यावा-पृथिवी) separated as well as correlated by '*Antarikṣa*' (अन्तरीक्ष वा अन्तरिक्ष). Sometimes again as '*Satyam*' (सत्यम्), '*R̥tam*' (ऋतम्) and '*Tapah*' (तपः).

In truth, *Prāṇa* (प्राण) being conceived and known as the fundamental World-Substance in the aspect of Moving Power and Creative Energy (which I have elsewhere developed and analysed as Cosmic Stress), the threefold-relation pattern was known to be a Cosmic pattern having evidence and illustration in all the macrocosmic and microcosmic realms of Matter, Life and Mind manifestation. The Universe was clearly, though also somewhat mystically, conceived as the couple Agnī-śoma (अग्नीशोम) which is but a *pāda* (पाद) or "quarter" of the Supreme Function (*Tat Savitur Varenyang Bhargo Devasya*) (तत सवितु वरेण्यं भर्गं दिवस), the remaining or "residual" three resting, as it were, in transcendent Eternity and Imperishability (*Amṛtam Diri*—अमृते दिवि).

The manifested world, physical, living and mental, to which the physical principle of *entropy* (or "running down") is applicable is *Agnī-śoniyā* (अग्नीशोनीय)—(metabolic as we may call it in Prāṇik language), but it is not the essential whole of Reality Manifestation. The plus and minus function which is expressed in the Time-Space-Causality scheme of the universe is only a section of the Supreme Function [*Brahmaṇ* = *Om* or *Śiva-Śakti* (शिव-शक्ति) = *Hauṁsa* (हौंसः)].

There is made a distinction between the last two, be it also noted. *Om* without the embraced 'HS' function—the two wings H & S—is more particularly expressive of the Transcendent Being-Reality, whilst *Hauṁsa* (हौंसः) is expressive of the Supreme Function (Power and Power-Holder being equated to each other)

both as being and becoming, noumenon and phenomenon. The Supreme Function is often mystically spoken of as *Aditi* (अदिति), *Vāk* (वाक्), *Hiranyagarbha* (हिरण्यगर्भ), *Indra* (इन्द्र), *Āditya* (आदित्य), *Varuna* (वरुण), *Vāyu* (वायु) in the Samhitā, and particularly as *Prâna-Brahman* (प्राण-ब्रह्म) or *Mukhya-Prâna* (मुख्य-प्राण)—a character designation—in the Upaniṣads. The Tantra is however more direct and explicit in giving character names. It is the Root-Principle in every act of creation and resolution. It is the "essential mass" of every form of existence. It is "rest mass" as well as "moving mass". When Einstein gives an equivalent of material mass in terms of a cosmic constant and gives a formula shewing the relation of mass and velocity, he has, evidently, touched a vein of a very deep-flowing solvent reducing the last but one obstinate vestige of "materiality" to *Sakti* (शक्ति) or Cosmic Energy.

Now that the energy has been "emancipated" from rigid determinism by the Principle of Heisenberg, and even made to assume a non-three-dimensional, probability character by the equations of the New Wave Mechanics, we are not far removed from the shores of a deeper and vaster ocean than the one which Newton had stood facing in awe and wondering humility—into whose unfathomed depths all later currents of scientific thought, in their straight or meandering course, have borne their mingled matter, mass and momentum. The "indeterminable" probability wave which the electron now looks like becoming can, very smoothly and comfortably, be a Prânik function. It seems as though it has taken the very last step for it. At any rate, if one now aver that it is so, Science can no longer shake her head and say a definite No. Physical Science has already gone beyond its depth in the search of the materiality of matter; but it has, nevertheless, not been denied a cheering and compensating enlightenment in another way. It has now revealed before its eye an almost rounded pattern of Cosmic Harmony, *Chhandah* (छन्दः)—so fundamental in Prânik evolution and manifestation. The Universe obeys pure space-time relations. Atomic and other "models" or moulds in so much waxing vogue in the days of mechanistic thinking appear to be in waning demand and relaxed,

superannuated requisition today. But *Uchchandah* (ऊँचः), as the Pure-Relational Picture of the Universe, now reigns supreme. Science, moreover, is nearly sure that the picture is objective and real and not subjectively ordered and imposed. And this is because the *a-priori* Ideas have declined to abide by the hedging and halting rules of the Kantian Critique.

If it be now permissible, nay necessary, to describe and deduce "material" objects and their properties in terms of Magnitude and Number Relation Patterns (Formulae and Equations), why should Ancient Wisdom and Science (पार्वीन चपरा-परा विद्या) be debarred from doing the same in a more fundamental, rational way ? Plain water is H_2O ; common salt is NaCl; organic compounds have generally cumbrous patterns. Nature, left to herself, takes a special delight in turning out her goods in crystals having geometric patterns. Atoms, again, are still generally believed to be "planetary". The Veda and the Tantra affirm, not without a good metaphysical authority and, one may add, steadily convergent and consistent scientific testimony, that every object and every event is, fundamentally, a specific Prāṇik Function, analysable into the three aspects of Mantra, Yantra and Tantra as before explained.

Matter, in its ultimate behaviour, is in congruence with an *a-priori* mental resumè and the deductions of pure mathematical reasoning are found in every crucial instance to be in conformity with accurate observational or experimental results, because, as the Vedic and the Tāntric Wisdom had perceived long before the days of the modern illumination, both Matter and Mind are the two wings of the same "Mystic Bird"—Hangsah; Prāṇa or Āditya, so that the functions of matter and mind are *a-priori* correlatable and *a-posteriori* verifiable, being but parallel presentations of the same basic Prāṇik function. The Prāṇik function covers them both and guarantees their correlativity and correspondence. As the Euclidean Geometry is a "limiting position" of meta-geometry, so we may say that Matter and material phenomena are a limiting position of the Prāṇik function—a general theme rendered in the special, restricted terms of events in a four-dimensional continuum. Mind and mental phenomena represent another limiting position rendered in terms of events in a differently selected and defined

continuum. Modern illumination has not, so far, lighted this Vital "Right" Wing of the Cosmic Structure as it has lighted the "Left" Wing of Matter manifestations. But has it not now nearly forfeited its right to call its own light the only light, and everything not apparently in accordance with it cobweb and moonshine ?

Prâna, to quote again the mystic language of a famous Vedic Mantra, has a *Pâda* (पाद) only in the universe of sense experience covering all realms of measured and measurable phenomena, but its remaining three Pâdas rise to higher and broader altitudes of transcendent *Sakti* (शक्ति), *Jyotiḥ* (ज्योतिः) and *Ānanda* (आनन्द) till all measures and modalities are lost in the Immense Alogical Absolute. Has not Modern Science herself left her own "safety" harbour for a voyage to the Supreme Unknown, and do not all her accustomed, cosy, familiar lights look dim and small and weird as she is leaving long leagues of distance behind ? She is speeding not with the puffed sails of the previous centuries ; her arrogance is now sobered. There is also a lull in the breeze that sped her. She is to-day definitely more cautious, calm and expectant. She has discovered not only a curved space, but a Time curving upon itself. Her Unknown and Undiscovered may not, after all, be a new continent but a continent lost and forgotten. She may be rounding not a corner but a half-circle, which may bring her Cavendish Laboratory almost within the shadow of *Naimisaranya* (नैमिशरण्य), and her Mount Wilson Observatory within hailing distance of the mystic and majestic *Himālayas*.

But, unfortunately, criticism in history, sociology and ethnology has not, generally speaking, taken the latest cue from Science whose spirit and method still it claims as its philosopher and guide, and whose high authority it exploits. Science and advanced Thought is witnessing, though perhaps as yet unsuspectingly, the resurrection miracle of Ancient Wisdom ; but historical Criticism buries its neck in the sand and will not see. The Vedas and the Tantras remain still the superstitious "lower culture" of the primitive man, full of fantastic fabled fancy. The Prânik picture is, for example, "primitive animism", or mediaeval "animus mundi"; the Cosmic *Vis-viva* is Cosmic *Vis-inertiae* or *Vis-mortuæ* made

alive by that great grand wizard in short clothes, Childish Fancy.

But all this is an altogether unwarranted assumption. The Prânik Culture System as manifest in them should be examined *de novo* with imagination and sympathy, with knowledge and understanding. While it is not good to put the new wine into the old bottle or the old into the new, each in its own suited receptacle and setting should be both tasted and tested. Irrational mixing up of the one with the other is no good. Perhaps the old wine has somewhat lost its colour and flavour, but it may prove none the worse for it in the taking and testing. The deeper one goes into the underground cellar, the stronger the liking one may grow for it. Many years ago, when Planck's Quantum Hypothesis was being successfully developed, and Einstein's Special and General Relativity Theory was being canvassed for general support, the present Introduction-writer attempted to induce old Vedic Concepts and modern Scientific Ideas to put their heads together and compare notes, and in that comparison, if I may also judge, the old partner did not certainly look ridiculously out of joint or hopelessly out of date. It was an unfathomed mine of knowledge and power into which we were ushered for earnest enquiry. Recent scientific advance has certainly not blocked or blasted that mine. It has probably led to even richer veins of essential congruity or correspondence. A more detailed and anxious enquiry was subsequently carried into a more dubious though perhaps ampler quarry in collaboration with the late Sir John Woodroffe, and that quarry—the Tantras—showed an unexpected bumper yield of worthy material. Some of the basic principles were specially studied such as the Varnamâlâ (वर्णमाला), Mantra, Kundalini, Nâda-Vindu, the Thirty-six Tattvas. Very recently, too, the Background of Japa (जप) or recital of Mantra—a practice so common, yet so ill understood—has been the subject-matter of an attempt at reaching some measure of scientific specification and philosophical clarification; and the total effect of all these labours, if I may venture to express an opinion on a matter in which I have had a small share, has been to lift the “barbary” ban from the so-called ‘primitive culture’

of the Veda and the Tanira.. But convention conscience and conscript judgment are not still unknown in the high-authoritative archaeological and historical quarters. Many theories in them, judged by an enlarged and revised code of a synthetic under-standing of human phenomena, may be found to be back numbers in the files of scientific methodology, having no right to block any new-comers' place in the sun, or for the matter of that, the passage of any new *entente* of the old and new and their prolific, though dispersed and diversified, kith and kin.

Now, to revert to the Prānik function for the last time. The material and mental functions are but two lateral variants of this. The approximate projection and "equivalent" on the sound-sense plane of a basic Prānik function is the Vija-Mantra. It is, commonly, that function rendered in terms of spoken and heard sound-elements or 'Varnas, but this is the *Vaikhari* (वैखरी) or gross form of the *Vija* only. It has a subtle and subliminal (*Madhyamā*) (मध्यमा) and a radiant and a revealing (*Pasyanti*) (पश्यन्ती), and an immanent-transcendent, pure (*Parā—पारा*) Rūpa also. Of these the last is the 'Base' of the *Prānik* function pure, as it is in itself, apart from an "Index" of projection and representation, and a "co-efficient" of limiting condition. This appeared to some advantage, as I think, in the Cosmic Stress Analysis in the "Approaches to Truth." However be it here noted that "*Vaikhari*" (वैखरी) *Mantra* (मन्त्र) is only the fourth Pāda (पाद) of the Prānik function projected on and representable in terms of the common sound-sense plane. Nevertheless, it has a horizontal as well as a vertical component. On account of the first, it enters as an element and factor into the domain of other sense-phenomena, as a constituent wave into the 'sensible' system of waves. On account of the second, it shoots up, so to say, and establishes contact with the subtle and middle, radiant and pure planes also. In other words, while it is a phonetic formula relating to events in the "sensible" world line, it carries its reference to an origin and a system of co-ordinates which cannot be completely defined in terms of the three dimensions of space and one of time. It exceeds a purely sensible specification, which however does not

make it non-sense as the 'Om' (ॐ); *Hring* (ह्रीं) *Kring* (क्रीं) is commonly thought to be.

As *Vaikhari* (वैखरी) it is, as before explained, 'Bhāh' (भः) —*Prthivi* (पृथिवी) ; as *Madhyamā* (मध्यमा) it is the joining middle, 'Antarikṣa' (अन्तरिक्ष) —'Bhubah' (भुवः) and as *Paśyanti*, (पश्यन्ती) 'Suvaḥ' (सुवः) or 'Dyauḥ' (द्यौः). *Parā* (परा) is 'Aditi' (अदिति) —The 'Fact' and not the 'Fact-section' (a view of Reality developed in 'The Approaches to Truth' and elsewhere). The four Pādas may, again, be correlated to the four "Aspects" (including *Amātra* or *Arddha-mātrā*) of *Om* ; to *Viśva*, *Taijasa*, *Prājña* and *Turiya* ; to the *Jagat*, *Jīva*, *Īśvara* and *Akṣara* Pādas of Brahman.

The formula, therefore, starting with the sensible shell of things or 'Nemī' (नेमि), carries us along the subtle causal link or 'Ara' (अरा) to the intelligible and rational centre and core of things—'Nabhi' (नाभि). Modern Physical Science is already fairly on the way to this rational core of things in Her fundamentally mathematical formulation of Nature. But her journey's end is not yet in sight. The Prāṇik formulation, when it dawns upon her, will straighten out many outstanding oddities, such as sub-atomic indeterminacy, the so-called "brute facts" of Russell the uncanny "i" inseparable from cosmic equations and probability functions, and so forth. The probability function may shortly, as one may devoutly hope, settle down as the *Prāṇik* function and, ultimately, as Ānandā-Jyotiḥ-Lilā (अनन्दा ज्योति लीला) Function of Śiva-Sakti. The *Prāṇik* formula is more realistic and revealing, more convergent, controlling and creative. Ancient Wisdom (ग्राहीण परा-चर्चा विद्या) had developed a powerful calculus of the Prāṇik Function, now handed down to us in bits and fragments, unfortunately for the most part hieroglyphic.

The Prāṇik diagram is, as we have said, the 'Yantra' (यन्त्र), to which basic systems of scripts, phonetic or ideographical, should, in the last instance, be traced. This *Yantra* has also four Pādas : apparent pictorial, for instance, a dew drop on a blade of grass sparkling as a point of gem in the morning sun ; the inner constituent picture such, for instance, as Molecular Chemistry may have drawn for it ; then the power-picture such for instance, as Atomic Physics, mainly with the help of the Spectra and Quantum

Mechanics, is still so assiduously working at. The power picture, for example the Bohr-Rutherford picture, in so far as it is being still modelled and remodelled after planetary and other patterns, has not yet outgrown the stage of what is called 'pictorial thinking,' and seems to be in declining favour today. We are, rather menacingly, confronted instead with equations in which the uncanny $i(\sqrt{-1})$ and the inviolate \hbar dominate still to deepen the mystery, intensively intriguing the expert perhaps, but also extensively mystifying the man in the street. The equation is *not* a power-picture, and it can be no substitute for it. The way is still on the "*Madhyamā*" (मध्यमा) 'Bridge' connecting 'this' with 'that', the apparent and formal with the real and vital. It is a shaky bridge that you cannot either easily walk or lightly skip across. Every step forward on it requires a balancing of ends and efforts and a readjustment of means and results. Since the 'bridgeway' is not to be storméd, every single yard of it must be measured and marked, covered and conquered. At the other end of the 'bridgehead' is the prize of plodding conquest—the '*Paśyants'* picture, radiant and revealing, colourful with the live colours of creative life, and calm yet aglow with the glory of realising Reason. Science and philosophy are now on the alert lest that reassuring and realising vision be missed or lost upon them.

Modern science, in drawing the patterns of things, has proceeded from photography to spectrography, and from spectrography to wave pattern or other designs. But she has not come yet to the 'biography' of the dewdrop. The 'bridge' of '*Madhyamā*', if we may remind her again, upon which she seems to have detrained and stood wondering at present, must be crossed with aspiring, inspired confidence, and at the other end of the transhipment resume her journey with a new equipment of ideology and fresh relay of methods.

The *Prānik* '*Yantra*' is, to begin with, pictorial and peripheral: and then diagrammatic and symbolical; and then diagrammatic and biographical; then rational and real. The 'real' in this last may present like a prism a three-aspect picture: real *Rūpa* (रूप), diagrammatic as well as formal; a real *Rūpin* (रूपिन्), that is, the basic *Prānik* function that bodies itself

forth in and as that *Rūpa* (रूप); and a *Rta* (ऋत), that is, *Chhandah* (छन्दः), or Reason which *Rūpa* and *Rūpin* manifest. Science in its study of the dew drop cannot stop short of the completed 'Theme'. But she is yet picking her way, in a maze of avenues and approaches, now losing, now finding her clue.

I have seen three remarkable photographs—all three believed to be and shown as genuine. The first was a 'Spirit-photo'; the second the photo of a 'thought body'. But I do not discuss them. The third one was a photo of the Sun during a total eclipse enlarged. The enlarged photo showed very distinctly a lotus structure with at least four distinguishable petals, in the luminous disc. Now the Veda and the Tantra have invariably associated the lotus with the Sun. Was it only a poetic fancy then? Let the total eclipse photography answer. Or, shall we again dismiss the resemblance as a passing accident, the vapourous envelope of the Sun having a knack for assuming queer, fantastic forms? Let probabilities and future observations decide. The point however is this: the *Prānik* diagram, such as the *Sṛt-Yantra* (श्रीयन्त्र) or a Vedic Altar *Yantra* is, is not pictorial and fanciful; it is even more than symbolical. It is the representation, though on our plane approximate, of a real *Rūpa* (रूप)—*Rūpin*—*Rta* (ऋत) trio embedded in the heart of the thing represented. It is a microcosmic as well as macrocosmic pattern. It is not a merely visual diagram any more than the Bohr-Rutherford atomic model is so. It is visualised by the eye of Reason, which makes it none the less but all the more real. We are searching for 'Rtam' and 'Satyam' in the midst of kaleidoscopic appearances, present and presentable, to all possible and conceivable view points. The sense eye gives many; imagination still many; wishful thinking still many more. But Reason—pure and transcendent—must draw and finish, if possible, the final Picture. This Pure Reason, too, is endowed with a light (*Dṛṣti*-ऽप्ते) of her own—the light of intuition as one may call it—'*Prajñā*' (प्रज्ञा), *Bodhi* (बोधि), *Prātivā* (प्रातिवा) *Jñāna* (ज्ञान) etc.

Thus we have an ascending order of the Mantra as well as the Yantra along all the depths and altitudes of the Cosmic

System. All these depths and altitudes speak but one language—the Prānik language—which is '*Mantra*'. And they arrange events in them according to one pattern—the Prānik pattern—which is '*Yantra*'. And further, they all behave in obedience to one law—the Prānik law—the law of '*Chhandah*' (छन्दः), Rhythm, Harmony, Correlation and Congruence—'*Tantra*'. Both the Vedas and the Tantras, and more particularly and universally the latter, recognised and worked upon this common basic framework. The other ancient cultures also had a share in this immemorial Science and Art of the Prānik Function.

Not only the depths and altitudes but the matter of fact plane or planes on which we commonly hold commerce and converse primarily speak the Prānik language. Wind and cloud, torrent and rain, storm and wave, the rustling or whistling grove, the creaking or crackling wood, birds, insects and animals, and even man himself in his natural, primitive, elemental expression—all speak the Prānik language of which the Tantrik or the Vedic *Vija-Mantra* is the basic pattern. They speak in mono-syllabic sounds, sometimes with a consonant 'base' (aspirated or unaspirated), a vowel 'co-efficient' (short, long or protracted), and an '*Anunasiku*' (अनुसिक) or *Visarga* (विसर्ग) 'index'. Man, in his primitive, natural state, spoke this vital language upon the basis of which the mighty *Asvatha* tree of diverse human dialects and, collaterally, of diverse human scripts, evolved, marking the epochs and pointing the land-marks of a most momentous functional and institutional history. That history is being studied, but it requires a further and deeper study to reveal to better effect the features of any epoch of vital emergence, and to better advantage the consolidations of any critical land-mark passed.

And most of all, the universe of basic, vital sounds should invite a deep analytical study, because it is in this rather than in the universe of limited physical phenomena with which science and her methods seem to be so much occupied now, that we can expect to reach and control the key-points of the major Cosmic Board of Reality-Power manifestation. Not only Matter, but what is incomparably more essential than Matter—Life and Consciousness

—can be reached through these key-points, showing what wonder Life is, what mystery Death is, what Meaning and Purpose Consciousness by its immanence in the World holds and works, and what Light and Immortality Consciousness in its transcendence and purity may envisage and ensure. The Tāntrik and the Vedic Culture as also many other derived or allied cultures were a direct essay, and a successful essay for that, to erect a practical as well as ideological Common Base wherefrom those key-points could be located, labelled and operated. They gave us an altogether different armoury of functional formulae and power-diagrams, and a distinct but powerful set of "congruent equations" —which three, as we have seen, were called Mantra, Yāntra and Tantra.

For the purpose of this kind of "functional analysis", the Sound as well as Rūpa elements had to be carefully isolated and then correlated according to certain basic principles. We have referred already to the principle of 'Bhūh', 'Bhuvah' and 'Suvah'. But there were others. There was, for instance, the principle of five-fold Prāṇa (Prāṇa, Apāṇa etc.) which has been worked out at some length elsewhere. There was, again, the principle of the five 'Bhūtas' (भूत) —Kṣiti and others—very imperfectly understood and loosely translated terms. There was, moreover, a classification of Sound and Rūpa elements according to a mystic Code of Devatās—again a most ill-understood word. Prāṇa, Bhūta and Devatā were each a basic Cosmic Principle the first having its stress weight on Fundamental Power-Energy, the second on Essential Matter-Mass (उपादात्) (subtle as well as gross); and the third on Consciousness as Power-holder and as "Informed" (in and as Mantra and Yantra, if not also in and as a Bodily Form).

In the code of Mantra, for example, these three—Prāṇa, Devatā and Bhūta—may be identified as 'Ha', 'OM' and 'Sah' respectively of the Basic Formula 'Hauṅgsah' (हौँगः). There were other principles of grouping also. In fact, the Tantra, in particular, had evolved a Vija—Nighantu and Vijabhidhāna—an elaborately worked out scheme and code of the basic sounds or Prānic functions. The Veda had evolved an 'Organon', of both doctrine and practice, of Mantra, Yantra and Tantra in the essential sense,

consisting of the famous six, 'organs' or '*Angas*'—Śiksā, Kalpa, Vyākaraṇa, Nirukta, Chhandāḥ, Jyotiṣa. But that old repertory requires a thorough shaking and re-shaking to-day. Every uttered syllable need not be taken as "Iti Śrutiḥ" or as 'Siva Uvācha'. A deep examination should be instituted into (1) the exact nature and measure of the *Prāṇik* function which a Sound or Rūpa element stands for ; (2) the basic principle or category under which it should be subsumed ; (3) the reason why it is so subsumed ; (4) a biographical and bio-metric description of that element so far as possible ; (5) a corresponding physical description as a limiting case ; (6) a qualitative analysis of the element to be connected with the above quantitative analysis ; (7) affinity or dis-affinity of one element to combine with another—the degrees of valency and measures of compatibility or incompatibility ; elemental selectivity as we might call it ; and (8) the laws or harmonies of forming functional compounds (such as 'Om', 'Hṛīng', Kṛīng etc.) and functional Reaction-cum-Resonance systems [as of the Mantras ओ तत् सत् "Om Tat Sat", 'Harih Om' (हरिः ओ), Aing (औ), Hṛīng (ह्रीँ), Kṛīng (क्रीँ)]. It is the harmonies of the functional reactions and resonances [kinetic as well as potential (Kuṇḍalini)] which is the theme of the immemorial Science of the Tantra. The Vedas, as we have seen, is a special presentation and illustration of this immemorial vital science. The totality of the Basic Functions is "*Nitya*" and "*Apauruseya*"—uncreated and eternal in a sense that can be understood. The Vedas do use the 'shorthand' or the 'short wave' (but not merely symbolical for that) code of basic sounds, basic diagrams and basic harmonies (*Rta*, Chhandah) ; but they use more commonly 'longhand' or 'long-wave' amplified form. The amplified form was believed to be an unfolding and specification of the '*Vijā*' or seed-form. From the '*Pranava*' or '*Om*' everything comes, every thing is '*Om*', and everything is reabsorbed into '*Om*'. The '*Om*', as also, some other basic *Prāṇik* functions, have been, from times immemorial, the objects of recitation, reflection, meditation and practical realisation with the Sādhakas.

For, it was and is still claimed by this practical science of realisation that the basic *Prāṇik* functions as *Mantra*, *Yantra* and *Chhandah*—are not "exhausted" in the creative process ; they

persist as a back-ground of Immortal Radiation [A'mritasya Dhârâ—**अमृतस्य धारा**; or R̄tam Satyam (ऋतु सत्यम्)]. They are "Cosmic Radiations" of a fundamental kind. The Cosmic Rays of Science are, probably, more directly connected with the "annihilation" of the mass of matter. But these "fundamental radiations" constitute an inexhausted, eternal streaming of Prâna-Brahman (प्राण-ब्रह्म) in the three parallel currents : व्यान—Vyâna, समानोदान—Samânodâna, and प्राणापान—Prânâpâna ; or of Nâda (नाद), Vîndu (विन्दु) and Kalâ (कला); or again of Mahâkâli (महाकाली), Mahâ-Lakshmi (महालक्ष्मी) and Mahâ-Sarasvatî (महासरसवती). Study and note the inner links of correspondence amongst the groups. 'Nâda', for instance, is the Perfect Potency as the Continuum to evolve, and 'Vîndu' is the Perfect Readiness as the infinitely condensed Dynamic "Point Universe" to evolve. These two 'Perfектs' evolve between themselves the "partials" or 'aspects', which are the 'Kalâs' of Varṇa and Rûpa. Now, the problem of practical moment—for knowledge, power and fulfilment—was how to make one's own 'set' and keep it in readiness for receiving, interpreting and utilising the Basic Unlimited Background Radiations. Modern Science is still busy with the limited Foreground Radiations. Both the Vedas and the Tantras had a common ideological insight and a common methodological outlook because both represented a common quest—the Basic Background in the three streams of Śavda (शब्द), Pratyaya (प्रत्यय) and Artha (अर्थ); or Vâk as Vâchaka (वाचक), Vâk as Bodha (बोध) and Vâk as Vâchya (वाच्य)—'Logos' or Word as Name, Meaning and Object as we may say. In the conception of Devatâ and other principles, too, they bore too marked a family resemblance to give rise to any reasonable suspicion that they had been originally aliens or "grafts" which, in later times, "crossed" but still retained traces and signs of their natural enmities and antipathies. Far from it ; from an original and fundamental unity and integrity of stock they have rather branched off into variant but connected systems of knowledge and realisation.

To the seeing believer, therefore, the Vedas as well as the Tantras are the rendering, as far intimately as possible in the terms of the Word, Object or Idea forms with which one

is familiar, or else, which one can, by means of an appropriate technique and method, observe and experimentally realise, of an Eternal Theme which immensely but inexhaustedly expresses itself as the sublimity and grandeur of creation. All Science and all Art also give us a rendering—in less vital and intimate terms, as we think, of the same Theme.

The point of importance is this: first, how to isolate the axis of the 'Om' and other 'Vijas'; the basic pattern and basic harmony, the 'entelechy', from the vast, varied, confused medley of sounds, forms and functions which alone our surface experience seems to give us; and secondly, how to evolve patent and potent functional formulae for describing in basic terms the nature of things of moment and successfully negotiating vital objectives.

The 'Vija' axis (विजा) should, for example, not only be isolated, but the Vija or Mantra itself should be raised to the requisite point of Prânik purity and efficiency by a process of reducing the vital resistance factor and eliminating the diverse damping effects ;—a process which, in the Tantra is described as नादसाधन— Nâda-Sâdhana and स्वरोदय— Svarodaya ; Mantra Uddhâra and Chaitanya—(मन्त्र उद्धार and चैतन्य) ; and in the Veda especially developed under the शक् called Sikshâ (शिक्षा). The essence of the thing is that the commonly closed सुबुद्धा नाडी must be opened up and vitalised, and Vâk (वाक्) must rise up the whole gamut of वैकारी, मध्यमा, पाश्यानी (Vaikâri, Madhyamâ, Paśyâni) and परा (Parâ). We may and commonly must start with an ordinary vocal sound ; but this will not be a Mantra (मन्त्र), able to reveal and render, create and realise, until it is thus "roused" and "raised", vitalized and potentized. A similar process must be used in the case of the 'Yantra' (यन्त्र), which should not remain a mere geometrical figure but must be transformed into an actual Prânik Power-zone specification with a charge of what I may call "Super-implications" or "Surcharge implications". Compare in Science the possibilities of "superresonant vibrations." Gross 'Mantra' (मन्त्र) or 'Yantra' (यन्त्र) has very limited 'degrees of freedom' and kinetic values like ordinary matter. The point is how to 'release' and 'raise'

them both. Take 'Om' or *Hring* or *Aing*, and shew (1) the Axis, Pattern and Harmony round and on the basis of which (2) the Vija (वैज) evolves by the laws of compatibility and congruence of the 'Varnatattas' (वर्णतत्त्व) or according to the principle of elemental selectivity as I have called it; and then shew (3) that the Vija (वैज) thus evolved should be associated with this Pattern and Form, this Function and Harmony. An almost parallel line of advance modern Science is following in her own restricted field. In the restricted physical field, again, we have to do all this when, for example, we study Hydrogen and Helium in terms of the electro-proton constituents and their arrangements.

This is a formidable task no doubt, but one that should be undertaken particularly at this juncture of the world-war travail with a pointer to take one's eyes off the S-apexed pattern of the present "Power-Triangle" whlch is nearly out of breath with its violent, forced, sibilant and almost sobbing respiration, and fix them on the H-apex of the reverse triangle which, through all this titanic trial and travail, is reversing itself again so as to become direct and dominant. What will such reversal of position in the 'Pranik' Pattern mean? 'Ha' is puissant and Mahâprâna *par excellence*, but it is also, in suited patterns, such as 'Hañsah', 'Sôhang'. 'Harih Om' etc. base-seeking and centre-going and axis-acting. It is a potent factor in the rousing of the Kundalini and in the opening up of the सुषुम्ना (Suṣumnâ)—[See the great work "The Serpent Power" by Sir John Woodroffe in which my own views on 'Kundalini' are incorporated]. Now when this has become dominant and S recessive, modern human aspiration and modern human endeavour will have become more centrally than peripherally directed, more base-seeking and axis-acting ; bent upon opening up the Path of सुषुम्ना (Suṣumnâ) with all its untold possibilities, subjective and objective, spiritual and material. Note in passing the vital components of the sound Suṣumnâ (सुषुम्ना) itself : हृ = अपान (outgoing, projective, sensuous), इ = प्राण + उद्दान (ingoing, elevative and super-sensuous), आ = समान + व्यान (equating, equilibrating, correlating and harmonizing). Suṣumnâ (सुषुम्ना) is

not merely a 'Body Axis' of Vital and Psychic Ascent ; it is a Cosmic Principle illustrated everywhere.

The "Power Triangle" in India for sometime past has been neither 'S' nor 'H'-apexed : it seems to have been 'Am' or 'Um'-apexed—the key-note of rather passive quiescence and acquiescence. But the reversed Apex is 'Om'. The present world Stress has already started 'the reversing of the reversed' that is, evolving again an 'Om'-apexed Power-triangle. And this evolution or "revolution" must proceed apace by revolving and "churning" her whole Power-magma along an 'Hs' (हृषी) and not 'SH' (शृङ्खी) axis. The evolved picture, then, will be 'Haungsah' (हृण्झः)—Śiva-Śakti combined. In 'Hs', creative, constructive synthesis is primary, in 'SH' dissipative, destructive analysis is stressed. Note that in the former 'H', in the latter 'S' is dominant. But the 'S' must enter as a 'second' co-factor in the axis of revolution in order that the hard stratified gneiss of so many centuries may soften and melt into the requisite form of magma or plasma for the future power-and-work-in-Light-and-Ānanda synthesis. The 'Am' or 'Um' apex combined with an 'Hs' axis will, then assume, to start with,—the form of the Prāṇik function (वृः or वृ्य)—a function especially suited to open up the Suṣumnā Path. As the Path opening is effected and the magazine of 'Coiled Power' made available for use, horizontally as well as well as vertically, the other Prāṇik functions such as 'Hring' (हृं), 'Kring' (कृं), Aing (एं) will 'emerge' to do *their* work and prepare for the final Prāṇik Consummation in 'Om' or 'Haungsah'. Note in this last the 'phonetic cycle' which implies and stands for the Basic Cycle of Nâda-Vindu-Kalâ.

In the analysis of 'Hring' (हृं), note that the first Varna (वर्ण) element "हृ" stresses and focusses 'अपान' at the 'base' ; 'र' is the reverberating, 'resonance factor' by which action is intensified ; 'म्' is Prâna + Udâna (प्राण + उदान) 'couple action' directed to Samâna + Vyâna (समान + व्यान) equilibration and harmony ('न'). Ha "हृ" is the Prâṇik magma here ; 'I' * the churning axis ; Ra 'र' is revolution ; 'M' 'न' the product evolved. 'न' is a 'कला' which passes into the fulness and perfection of 'नाद-विन्दु' from which it evolved. It is the Soma-kalâ or Somârddha which Śiva wears-on

His forehead. 'ओ' seizes upon the 'रात्र' rather than on the 'ददान' factor ; and 'ऐ' upon the 'चदान'. The 'ऐ' in 'ओ' gives the idea of a flashing, sparkling radiation (cf. 'photons' as particles—विद्यु-प्रिद) ; the 'ऐ' in 'ओ' gives the idea of a rolling and swelling, undulating and rippling function (cf photons behaving as waves). Not only the Tantra but the Veda, also, in the Brâhmaṇa and Upaniṣad parts, appears to be especially interested in the Varṇa and Rûpa analysis of the Sounds and Patterns employed. It was not a phonetic or ideographic fancy exercise pure and simple.

The above analysis should be taken as being illustrative and indicative, and not as rigidly definitive and demonstrative. For demonstration, we require fully-equipped 'Prânik Laboratory methods', of both elimination and completion, such as 'नाद-साधन', 'खटोदय' etc. The entire life-curve, the whole biography, of Sound and 'Rûpa' is revealed in the realization of Paśyanti. It should also be remembered that there are alternative schemes of Prânik analysis as there are alternative, and apparently equally cogent, methods of theoretical or even of experimental analysis of physical phenomena. A spirit of chauvinistic dogmatism and a spirit of sympathetic understanding in a matter, so obscure and involved as this, would go ill together. In the Upaniṣads as well as in the Tantras we meet with many alternative schemes of analysis such as Prâna-Mano-Vâk, Sun-Moon-Agni, Rig-Yajuh-Sârma etc ; etc. The 'Ākâśa' and other Bhûtas, and the Devatâs as supplying bases of analysis have been spoken of already. The cosmic scheme of stars and planets was also believed to be in fundamental congruence with the Prânik Functions as represented by the Varṇas and Rûpas and their 'vital organisms'. What is here is there ; what is not here is nowhere : this was the principle accepted and acted upon. The movements of the far-off heavenly bodies and their configurations are elements of a Total Harmony of which the minutest microcosmic patterns and events are also embodiments and expressions. In fact, the Varṇa and Rûpa functions and their combinations were considered as elements of a Harmonic System —like the component notes and measures of a symphony—which refused to lose their domicile in any domain of Cosmic manifestation. The 'Varṇa' was not a 'vocal' and the

I THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

'Rūpa' a 'visual' incident or accident only. Of the whole life curve of a Varṇa we have exhibited before as only a section or "arc." The 'beginning' as well as the 'end' is screened off—unmanifest. In their fundamentals as Prāṇik Functions, these are believed to be the 'bricks' of the whole cosmic structure. So that to know and master them fully is to know and master the whole 'situation.' The laws of Prāṇik Functions are, again, illustrated in all realms of existence.

Now this ancient structure of Functional Science and practice was shared by the Veda and the Tantra, and each had a large and widely dispersed family (शास्त्र and आत्माय). The ancient culture system was no monopoly of a particular region or race. In its very wide space-time distribution, however, the Aryan Pattern often represented, no doubt, a "peak" of special purity and influence. But that "peak" was not a point of static, stationary eminence. It moved from place to place, from age to age. Whenever or wherever the "peak" existed, it meant a place of "high potential" from which currents, of both inductive and conductive influence, flowed to places of "low potential." But a place of low potential became a place of high potential sometimes. Then that would be a starting centre for spreading and reacting wave-trains. In this way, a live, dogmatic picture of ancient history, in whch the Indus Valley, the Mahâchina and other lands, as also many successive ages, must enter as vital components, in which the Veda and the Tantra for instance, should be studied congenially and congruently and not extraneously and exotically in relation to each other, still remains to be drawn, though it has been long overdue. Many years ago I attempted, in a fairly large work, to draw the outlines of a dynamic history of this kind. It requires the services of a host of competent workers in the field. It is a work that demands not only a clarification of the principal outlines, but a filling-up of many a lacunae, developing of many a not-yet distinct feature in the 'negative,' correcting and retouching of every detailed delineation and expression, verifying of every single bit of material and testing of every single tone of colour and meaning. In my retirement I was expecting the right type of man to come forward to

FOREWORD

undertake the right type of work. I am glad, therefore, to be able to introduce the present original, instructive work of Swāmi Śankarānanda, with the general plan and purport of which I am in substantial agreement.

This is not to say that I have been able to test every bit of material, whether of data or of inference, in the structure that he has designed and for which he has laboured. It has appeared to me sometimes that, perhaps, a disproportionately larger place has been given to the plausible and fashionable "Solar myth" and "primitive mind" explanation than this can either legitimately claim or justly deserve. The question is not of a 'primitive mind' but of another mind, and one may add, of a full-grown mind. The ideas and the language of ancient Wisdom demand a deeper analysis. Swāmi Śankarānanda has undertaken such analysis and is evolving a method, which may prove successful, of attacking the main citadel of "ancient mysteries", through the difficult but negotiable moraine of "unseemly" Scripts, and the dubious but not impassable morass of "uncouth" Sounds. Our dreams commonly have neither rhyme nor reason, yet recently a method has been evolved in Psycho-analysis to make them tell a rational and profound story of the working of the sub-conscious mind. Hieroglyphics are unintelligible yet a method has been evolved to rewrite the "lost" pages of ancient history by deciphering them. These two instances, at least, should encourage an earnest enquirer like Swāmi Śankarānanda to pursue his own path which promises to lead into the heart of this formidable yet vital mystery. I am glad that he has not chosen to bask in the sunshine of big departmental favour or to burn appeasing incense with others at the altar of high authoritative fawn, in his courageous pioneer quest after Revealing Truth.

SWAMI PRATYAGATMANANDA

The Supreme Prakriti ; who chases all fears
And grants all boons, clothed in human form,
Who Comforts mankind ; who affords delight
To all Her trusting devotees ; the World's Mother,
I salute.

Abhedananda

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

Vol. II

CHAPTER I

THE VEDAS

We have found in the previous volume that the pre-historic Indus cities were the original abode of the Vedic Aryas who had developed their social and religious culture and built up a far too composite civilization in that hoary age during the period indicated by the Indus Valley finds. We have found that the stage of an agrarian and clannish people propitiating their clan gods by hymns transmitted orally from generation to generation and retained in memory had already been passed by ; and we meet in the next stage a full-fledged nation having absorbed all the clans and discovered a comprehensive script to express all their ideas and subtle refinements. The sacrificial fire lit by the Vedic Aryas had already been enveloping the heavens with clouds of smoke. The many and various names of the Vedic deities themselves that we find in Agni, Marut, Indra, Soma, Vâyu, Aditi, Dyou, were on the lips of everybody and the whole atmosphere had been vibrating with the sonorous chanting of the highly musical and profoundly solemn hymn addressed to them. In fact the incantation of the Vedic hymns had spread a deep veil of mystery over all their daily worship and works.

The people lived peacefully in the valley of the Indus for a very long time practising their time-honoured customs and sacrificial rites. The country stretched from the high-lands of

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

Afganisthan to the mouths of the Indus, where the old city of Mohenjo-Daro still stands in its ruins. Marshy forests are generally known to exist near the mouths of big rivers, which usually bring a great amount of silt every year in their course from the mountains to the sea. The Indus also had had its share of silt deposit thus, and the presence of marshy forests in the immediate vicinity of Mohenjo-Daro at the mouth of the Indus where it met the sea has been proved by the skeletal remains found there of crocodiles, snakes, tigers etc. that abound in them. The existence of the sea just below Mohenjo-Dero will be proved beyond all doubts if we take into consideration the Geological report about the nature of the soil just south of the Himâlayas. There we read : "The depth of alluvium along the outer edge of the Himâlayas is great amounting to about 15000 to 20000 feet towards the northern boundary of the alluvial plain."^{1(a)} From this report we gather that the sea was originally just beneath the Himâlayas, but later receded further south as it yielded to the silt pressure brought on annually by the great rivers. The Indus at its confluence with the sea had divided and sub-divided itself into branches forming a number of islands. These islands formed by the Indus in Mohenjo-Daro were like the islands existing today at the mouth of the Ganges not far off in the Sunderbuns from Calcutta. In course of time the Indus brought with it masses of silt matter which were deposited in the bed of the sea, and the sea gradually receded further south. The deltaic character of the country brought on by the formation of these islands by the Indus therefore changed and the islands became a continuous land. This change of nature of the land in the pre-historic period may be compared to the change going on in the modern times in the reshaping of the Sunderbuns near

1(a). The Memoirs of Geological Survey of India, Vol. XLII, pt. 2, p. 119.

THE RIGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

Calcutta and to the change that occurred in the character of the well-known place called Navadwip in Bengal. 'Navadwip' is specially a significant word as it literally means 'nine islands'.

In the meantime the population multiplied rapidly as the highly cultured civilization still developed and flourished, and land had to be found to meet the demand of an increased population. Dense forests were cleared for larger accommodation and land was reclaimed but with injurious consequences upon the rainfall of the country. Due to lesser humidity caused by the cutting down of the forests the rainfall diminished to the great disadvantage of the inhabitants of the land.^{1b} The sun-dried bricks used in the masonry of the late period in the place of well-burnt bricks used in much better buildings of the early period testify to the aridity of the place consequential upon the decrease in the rainfall.^{1c} This diminished rainfall injuriously

1(b). And in the pre-historic period, with which we are concerned here, the similarity between the two would appear to have been no less striking in as much as both appear to have been far more fertile and to have had a substantially heavier rainfall then, than now. Let me point out to a few specific features in support. Firstly, from the earliest level or the VIIIth stratum in mound F, the use of burnt brick was as common as at Mohenjo-Daro, though from the VIIth stratum onward till the latest occupation sun-dried bricks is found to have been used side by side with burnt bricks. Secondly, with a favourable river system described above there must also have been good forests and sufficient vegetation to induce a larger rainfall than at present. And thirdly, the animals depicted on the Harappa and Mohenjo-Daro seals, as already pointed out by Sir John Marshall, are commonly found in damp jungly country. M. S. Vats : Excavation at Harappa, Vol. I, pp. 4-5.

1(c). The Masonry of the late period.....is mostly poor as compared with that of the intermediate period ; in general the further we dug down into the mound, the better the Masonry, and larger the buildings we found..... We have indeed, come upon a striking example of the decay of an once honourable city, the cause of which we suspect to be the vagaries of the

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

affected the big rivers and it affected the mighty river Saraswati which could no longer find its way to the sea and it lost its existence in the silt and sand it had carried before.

These severe climatic changes wrought such a havoc that the land could no longer maintain its people and a large number of them was thrown out in successive waves from this great centre of enlightenment in the intermediate period of the Indus civilization. The onward march of a great cultural progress thus received a tremendous set-back by this exodus of the people which eventually brought ruin to the Indus civilization. Those of the people that remained behind in the land lost all touch with the main body that had gone out. The arts and crafts therefore naturally deteriorated carrying in their wake the decline of a splendid culture. The clumsy and bad workmanship shown on the buildings of the late period bore mute yet striking witness to this deterioration culminating in the ultimate decay of a once venerable city built upon a colossal civilization.

These people moved towards the east and the south and along with them shifted the centre of culture too. In course of time they spread over the length and breadth of the Indian sub-continent. The Hindus of today are the descendants of that great and glorious people who built the beautiful Indus cities and attained to the summit of culture and civilization even in those pre-historic times when all other peoples of the world were steeped in the darkness of ignorance and many of them were roaming about painted in the woods. It has been pointed out by Dr. Bhupendra Nath Dutta that the skull forms of the Indus people are still found among the Indians of our days.¹⁴ The cultural affinity of the

Indus, rather than pressure by invaders..." E. Mackay : Further Excavation of Mohenjo-Daro, Vol. I, p. 6.

1(d). Rgvedic Culture of the Pre-historic Indus, Vol. I, pp. XI-XLIII.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

modern Hindus with that of the people of the ancient Indus cities could not be denied even by Sir John Marshall.² He has maintained that modern Hinduism has absorbed all the religious practice of the pre-historic people. Yet he would not admit the logical sequence and hesitates to hold that the Indus valley culture was evolved by the Vedic Aryas, who, according to him, came to this region at a later date. This assumption on the part of Sir John Marshall has made the Vedas a literature of later origin than the Indus civilisation and has introduced probably unwittingly the highly controversial debate, on the date of origin of the Vedas, upon which the scholars have not yet been able to agree.

The culture of a people leaves its foot-prints in their literatures. It is obvious that before any theory relating to an ancient culture and civilization is sought to be promulgated the literatures of the people embracing that culture and civilization should be studied and studied well. If Sir John Marshall desired to put forward the age of the Indus civilization as being older than the Vedic, then one would expect in reason and logic that he should have discussed the Vedas to maintain the ground upon which he was seeking to stand. In the case of the Indus civilization, this factor appears to have been totally neglected and the Vedas was not only not taken into consideration but they were ignored and summarily brushed aside. The only literature of the modern Hindus that seems to appeal to Sir John Marshall is the Tantra, to which he deigns to assign an earlier date. But in this respect too his theories and conclusions appear to have been based mainly on hearsays and popular theories that are current in the name of the Tantra.

2. Mohenjo-Daro and Indus Civilization, Vol. I.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

Like the Vedas, the Tantras also stand out pre-eminently in the Indian literature ; and we propose to study them one after another to find out to what extent they can help us in throwing light on our subject.

The Vedas consist of hymns addressed to the various deities, such as the sun, the sky, the earth, the rain and the fire and they give a detailed description of the sacrificial rites performed for propitiating these gods which are the source of the later beliefs and practices of the Hindus.

In the pantheon of Vedic gods the Sun occupies the most prominent place and very rightly so. Is not the sun the first wonder to the most primitive mind ? Its glorious rising dispels all darkness, gives light and thus resuscitates the whole universe from its diurnal death. The night was a dreadful mystery to the ancients. It released all the dark forces. The ferocious anirhals, savage people and evil spirits were associated with the darkness of the night. With the advent of the sun they all hastened to take shelter in their respective dens. 'Can any of us wonder why a simple, unsophisticated man, standing alone on the sea-shore at the break of day, welcomes the rising sun, calls him the friend of humanity, the giver of light and warmth, the restorer of life and bestower of wealth and prosperity ; or when he salutes him and offers him everything that he possesses, with the same spirit which we have when we offer anything to our best friend and benefactor ?'

The ancient Vedic people greeted this friend and benefactor of humanity with hymns of praise, worshipped him by offering seat and entertained him by the offering of Soma-juice.

These hymns of praise differed from clan to clan. Though the sun was the principal deity, each clan had a special name for him and worshipped him in that name and in that alone. The hymns having thus varied, one clan recited hymns in praise of Varuna, another in praise of

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

Indra, others again in praise of Marut, Garutman, Vâyu etc, but the Soma-juice remained a common offering for every clan. The Soma was thus the common offering in the Arya family. The Soma is called the king (Râjâ), householder (Grihapati), and given many other beautiful and loving appellations by the people. It created a bond that linked the diverse clans.

The word Soma was first used to mean a creeper, then it meant the juice of the creeper, Soma. The juice which is like water, made the people use the word for water and it came to signify 'rain' at a later period. The rain existed in the sun. The sun was the habitat of the 'rain,' the reservoir of the rain. The rain was another aspect of the sun, its energy. Rain and Soma being identical the word Soma came to mean the energy of the sun. Being related to the sun as its energy, the word Soma, in gradual process of evolution came to signify the sun. The Soma accordingly is both the sun and its energy water.

The evolution of the word Soma brought in its train a deeper transformation in the society. The common deity Soma having thus been identified with the sun captured the imagination of the people. In place of other solar deities Soma was installed. The notes of diversity existing amongst the Arya clans began to disappear. The clans were grouping themselves in distinct communities. Instead of the names of the Gotras the names of communities formed by these clans or Gotras came into vogue. In place of Vaśîtha, Viśvâmitra and other Gotras we come accross the names of Deva, Manuṣya, Râkṣasas, Asura, Daitya and other communities. It should be remembered that these names meant the Arya clans only. While Vr̥haspati was the priest of the Devas, the Daityas had their priest in Sukrâchârya. Both these priests were born of Arya families. In this way as the people underwent a transformation their

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

gods too suffered a change. They lost their primitive nature, and in the later Vedic period the names of the different gods of the various clans were forgotten and Soma reigned as the supreme God.

In subsequent times however the Soma creeper could not be procured. The people therefore in course of time forgot all about it. So in post-vedic literature one misses the word Soma altogether and in its place we meet the word Sâvitri. Sâvitri represented the Soma and comprehended all the conceptions attached to it and stood in its place. The deity was accepted as Soma's substitute in common amongst the diverse communities of the Aryas. Even as Soma had signified water or energy, Sâvitri also came to mean the same. The Brâhmaṇas say, 'Apa is Sâvitri.'³ As the sun reveals the external objects, the Vâk also reveals the internal ideas. In this respect the Vâk and the sun have the same function. The Brâhmaṇas say, 'Vâk is Sâvitri.'⁴ The solar deity itself in its masculine form also was depicted as the Vâk. Thus in the expression the 'Vâk is Indra'⁵ we find that the solar deity Indra had been designated as the Vâk. Thus we find from the said quotation that the conception of the sun, the revealer of the external world was absorbed in the ideas of the revealing nature inherent in the word Vak. So to an initiate (Brahmachâri) entering into Aryahood is passed on Vâk or Sâvitri, the revealer of intellect, which is a hymn in praise of the solar deity. The idea is that as speech reveals the mental idea, so the repetition of the name of the solar deity would reveal the true nature of it. It is written in Gâyatri metre. So the hymn came to be called Gâyatri.

3. आपः सावित्री । जौ० च० ४२७६

4. वाक् सावित्री । गो० पु० १।६६ ; जौ० च० ४२७०।१५

5. वाम्य इत् । कौ० २।३ ; वाम्या अप्यः । श० ६।१।२।२८

THE RIGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

The 'Brâhmaṇas' derive the word Gâyatri from *Gaya*, which means *Prâna*. Thus they say : 'She is that who holds (sustains) Gayâ. Gayâ is Prâna. Hence, she sustains Prâna. For this reason she is called Gâyatri, the sustainer of Prâna.'⁶ Prâna, we know, is the name of the sun in the Tantras. So, in fact, the sustainer of Prâna, Gâyatri, actually sustains the sun. It is the energy that sustains, hence, Gâyatri is the energy of the sun. This energy of the sun was recognised as the feminine aspect of the sun by the Aryas. This feminine aspect of the sun was Soma of the Vedas and Sâvitri of the later Hindu pantheon. The Gâyatri metre may be also called the sun-metre because like the sun's three feet in the sky, the Gâyatri also has three feet. This metre is composed of twenty-four letters in three lines of a verse. A line of a verse is called a pada or a foot in Sanskrit. 'Gâyatri is three footed'⁷, 'Gâyatri is eight lettered'⁸, 'Gâyatri is twenty four lettered'⁹ say the Brâhmaṇas. There is another arrangement of Gâyatri found in the Brâhmaṇas. It is composed of twenty-seven letters. Hence, each foot contains nine letters. The additional letter is *Om*.¹⁰ The same idea occurs in Bṛhadâranyaka Upanishad also, which deals with it more elaborately and adds a fourth foot which shines and which is beyond human reach.¹¹ 'The first foot is composed of three letters, standing for the earth, interstitial space and the sky respectively and has eight

6. स वैवा गया तदे । माणा वै गयाः । तत् माणा तदे । तद् यद् गया तदे तात् गायत्री नाम । श० १४।८।५।७
7. चिपदा गायत्री । ता० १०।५।४
8. अष्टावरा गायत्री । ऐ० २।१७ ; ३।१२
9. अतुविश्वति अष्टरा गायत्री । ऐ० ३।५।६
10. अवाचरा वै गायत्री, अष्टी तात्रि वाचनमाह प्रणयो ववकः । श० ३।४।१।५
11. अवाचरा एतदेव हुरीय दद्यतं पदं परोरजा य एष लपति । उ० ८०

५।१४।६

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

letters.¹³ 'The second foot is composed of the words meaning *Rk.*, *Sāma* and *Yaju*.¹³ These three words also contain eight letters'. 'The third foot is composed of *Prāna*, *Apāna* and *Vyāna*. These three words also have eight letters.'¹⁴

The three feet of Gāyatri or the sun gave rise to various conceptions regarding the supreme deity. The mythological conceptions about Vāmana, the incarnation of Viṣṇu, who with his three steps covered the earth, the heavens and the underworld, arose out of this primitive conception of the sun's three phases of existence. The still anterior conception of the three strides of Viṣṇu, that of the three feet of Aśva can also be traced to it. The culminating point, however, is reached when the idea of the three gods Brahmā, Viṣṇu and Rudra are conceived out of the three aspects of sun's career in the sky during the whole day. The three forms of goddess Chandi also emerged from these three phases of sun's march through the sky. Thus the first manifestation of Chandi has her Ṛṣi in Brahmā, and Soul in Agni or fire.¹⁵ The second manifestation has her Ṛṣhi in Viṣṇu and the Soul in Vāyu.¹⁶ The third manifestation has her Ṛṣi in Rudra and Soul in the Sun.¹⁷ Brahmā, Viṣṇu and Rudra are the three solar manifestations. The Fire, Vāyu and Sun are the three names for the same solar deity. Thus the goddess Chandi actually represents the sun in its three diurnal phases.

As the energy or the female aspect of the sun, Gāyatri

12. भूमिरकर्त्त्वं द्यौः । उ॒३० उ० ॥१४१२
13. चूचो यजुं वि सामानि । उ॒३० उ० ॥१४१३
14. प्राणोऽपानीव्यान । उ॒३० उ० ॥१४१४
15. प्रथम चरितस्य व्राजाच्छविः, चप्यसत्त्वम् ।—चत्तौ ।
16. भध्यम चरितस्य विष्वाच्छविः, चायुषसत्त्वम् ।—चत्तौ ।
17. उत्तर चरितस्य रहस्याच्छविः, सूर्यसत्त्वम् ।—चत्तौ ।

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

was greeted as Brahmāṇi in the morning, riding on a swan Vaiṣṇavī in the noon, riding on Garuḍa and as Rudrāṇi in the evening riding on the Bull. Even today the modern descendants of the Aryas greet her by reciting : 'Let the effulgent light of Savitr, that reveals the three worlds, *Bhu*, *Bhūva* and *Sva*, be meditated upon ; let its effulgence enlighten our intellect.'

Besides the above conception, the sun was also conceived as one with five faces. With these five faces, which actually were its rays, the sun covered four corners of the earth and the firmament. This idea has been expressed in the Chāndogya Upaniṣad and later on in the Brhadāraṇyaka Upaniṣad too. Thus we read : 'That Āditya is Devamadhu. The sky is its circular path. The interstitial space is its reservoir for water. Its rays are its children.'¹⁸ Its eastern rays are its eastern Madhu-nāḍi....¹⁹ 'Its southern rays are the south Madhu-nāḍi....²⁰ 'Its western rays are its western Madhu-nāḍi.'²¹ 'Its northern rays are its north Madhu-nāḍi.'²² 'Its upper rays are its upper Madhu-nāḍi.' Their nature is hidden. The flower is the Brahman and the nectar is water.'²³ In the above quotations, *madhu* means water

18. अस्मी वा आदित्यो देवमधुः, तस्म दीरेन तिरस्तीत्येत्योन्नामौचम् अपूयः
मरीचयः पुष्टाः । क्षा० उ० ३।१।
19. तस्म ये प्राची रश्मयसा एवास्य प्राची मधु नाश्यः । चक्ष एव मधुकातः
यजुर्वेद एव पुर्यं, ता अवता आप । क्षा० उ० ३।१।२
20. अथ येऽस्य द्वितिणा रश्मयसा एवास्य द्वितिणा मधुकातः यजुर्वेद मधुकातो
यजुर्वेद एव पुर्यम् । क्षा० उ० ३।१।३
21. अथ येऽस्य प्रत्ययो रश्मयसा एवास्य प्रतीचोन्नामौचमाश्यः सामान्येव मधुकातः
सामवेद एव पुर्यम् । क्षा० उ० ३।१।४
22. अथ येऽस्योदयो रश्मयसा एवा सोहीयो मधुगायोऽथवार्त्तिरस एव मधुकातः
श्वितिहासपूर्याणं पुर्यम् । क्षा० उ० ४।४।१
23. अथ येऽस्योर्बां रश्मयसा एवास्योर्बां मधुकायो गुणा एवादेशा मधुकाताः
ब्रह्मैव पुर्यं, ता अवता आपः । क्षा० उ० ५।५।१

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

and *nādi* the reservoir for water. Thus *Madhu-nādi*, means reservoir of water. This conception of the rays of the sun as water is in conformity with the Vedic conception of Soma in the sun.

Later, the Chāndogya calls these five divisions of the sun's rays as its five faces. 'The first Amṛta the Vasu's drink by the fire-mouth. The devas never eat nor drink it. They are satisfied by its sight only.'²⁴ 'The second portion of Amṛta the Rudra drinks by the Indra mouth. The Devas etc.'²⁵ The third portion, the Adityas live on by the Varuna mouth. The Deva etc.²⁶ "The fourth portion, the Maruta drinks by the Soma-mouth. The Devas etc."²⁷ 'The fifth Amṛta the Sādhyas live on by the Brāhmaṇ mouth.'²⁸

In the dawn the sun, was greeted, and offered a seat. This seat was called the Yupa. The literal meaning of the word *Yupa* is 'one that joins'. As a seat, the Yupa joins the sun to it. This Yupa was made in two varieties, Sakala and Chasala. Sakala, which was also called *Svaru*, was with branches.²⁹ Chasala was made pointed in its upper extremity and was stripped of its branches.³⁰ It had a round nodule made out

24. तदयत् प्रथमं अभृतं तद्वसव उपजीव्यति अधिना मुखेन, न वै देवा अश्रव्यति न पिवन्ते तदेवाहृतं हहा दृष्ट्यति । का० च० ३।६।१
25. अथ यद् वित्तीयमसृतं तदक्षडा उपजीव्यति इन्द्रैष्य मुखेन । का० च० ३।७।१
26. अथ यत् दत्तोयमसृतं तदादित्या उपजीव्यति वर्षयेन मुखेण । का० च० ३।८।१
27. अथ यज्ञतुर्यसृतं तद्वाहृत उपजीव्यति सोमेन मुखेन । का० च० ३।९।१
28. अथ यत् पञ्चमसृतं तत् सामा उपजीव्यति ब्रह्मणा मुखेन । का० च० ३।१०।१
29. खदम् ग पेषो विन्दयेत् अज्ञन् । R. V., 1-92-5
30. अधारम् ये अवश्यूपाय तज्जति । R. V., 1-62-6, V. S., 26-29, T. S., 46-8-2, M. S., 3-16-1; 182-8, K.S.A., 64, अवाज्ञायत्त खरतः पूषिक्षाम् । R. V., 3-8-10; T. D., 2-4-7-4, A. P. C., 7-28-2. अूपस्य वयो नेतारः प्रथमः अज्ञनः स्तरा'स्त्रालः च इति । श० च० का० ३।६।२

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

of its upper end called *Kataka* or *Chasala*.³¹ The *Svaru* with *Chasala* look like horned animals.³² The *Yupa* with branches was the main one, on it the solar deity took his seat in daily worship. It was anointed with *Madhu*. *Madhu* is another name for *Soma*-juice. Thus we find : 'The *Adhyaryus* are anointing you with divine *Madhu*'.³³ This *Yupa* was planted on the east of the *Ahavaniya Agni*.³⁴ Then white robes were put on it. The *Rg Veda* says : 'Covered by bright and white clothes let the *Yupas* appear before us'.³⁵ The *Yupa* called *Svaru*, has been thus mentioned in the *Rg Veda* : 'Ye stem, thou, that art cut and felled, arise with your thousand branches (in the place of sacrifice), so that we also may be of thousand branches, i.e., we may also live with many children'.³⁶ 'The intelligent *Adhyaryus* were washing the *Yupa* to purify it.'

The *Yayur-Veda* thus describes the process of purification of the *Yupa* elaborately. 'First recite 'the first is *Sakala* etc.,' then throw it in the pit made for the *Yupa*.³⁷ The *Devas* will then entwine the *Yupa* with a rope made of threefold *Kuśha* grass, in three circuits in its *Nāvi* or the middle.³⁸ Then

- 31. यूपकट्टकः अचसमासि सूचक काटस शिरःस्ति वज्राकारे काष्ठमये पदार्थे चंचाले । — अमरः
- 32. शङ्खाशीवेञ्चिन्हाणा संदहश्च चवालवन्त खरवः पृथिव्या । RV., 3-8-9.
- 33. अच्छन्ति त्वामभवे देवयनो वनस्पते मधुना ढैवेन । RV., 3-8-1.
- 34. उद्धीयतानाः कविभिः पुरस्ताद् । देया देवानाम् पिवत्ति पाणः । RV., 3-8-9
- 35. त्रुवा मुवासाः परिवौत अगात् । RV., 3-8-4.
- 36. वनस्पते शतकल्पो । विरोह, सहस्रकल्पः । वि चर्यहिनः । ये त्वामये स्तुष्टिसेतिजानः प्रणिनाय महते सौमगाय । RV., 3-8-11.
- 37. प्रथमं शक्तं चार्यौ शौरसीति पठिला तुपकावटे शक्तः गिर्जिषेत् । शू०, य०, काण्वः १५१६
- 38. (1) परीवोरसि परिल्ला देवोर्विष्णो अवान्नाम्, परीमं याज्ञां रातो ननुव्याप्ता-गिति । शू०, य०, काण्वः १५१६

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

the Yajmâna sprinkles water from a pitcher over the Yupa to purify it and invokes the sun over the Yupa by reciting. 'Ye, all pervading Aruna, I bow down to thee, please do come and take your seat.'³⁹ Then wives of the Yajmâna should go with pitchersful of water near the Yupa and offer water to the deity by saying : 'I purify Thy Vâk, I purify Thy Prâna, I purify Thy ears, I purify Thy generative organ, I purify Thy anus, I purify Thy nature.'⁴⁰ The priests then should snatch away the pitchers and sprinkling water over the Yupa recite : 'Let thy Vâk be in peace, thy eyes be in peace, ears be in peace, let whatever of anger remains in thee be pacified, let that be purified too, let thy days be peaceful.'⁴¹

This Yupa was the symbol for an imaginary tree of light, over which the sun daily rises. It was the conception among all the ancient peoples that the sun, which looked like a red flower or a red fruit, must have some stem to support it. No such stem was visible, hence they conceived that an invisible tree of light daily grew in the morning with the sun on it. In completing the circuit over the sky the tree of light goes with its head downwards and the root in the sky, and goes beneath the earth to come again in the next morning with its head upwards.

(iii) विग्रहा विव्याधामः कौशीरवनया नामिनावे चिह्नं परिव्यर्थतः ।
—काल्यायण ।

- 39. (i) नमस्त्रांतानाऽनर्वा मे हि । इतद्युग्मा उपचृतस्य पथा उपदेवीरापः
यज्ञा दोहुः सुपरिविष्टा । श०, य०, काल्यः १।६।३
(ii) लम् अनर्वा श्रुतुरहितः सन् प्रेहि समस्ति पथं लं प्रकर्णेनागच्छ ।—काल्यायण ।
- 40. पास्त्रेजन इक्षा वाचवदि, वाच' ते शुभ्यामि, प्राण' ते शुभ्यामि, ओऽव' ते
शुभ्यामि, भेदुः ते शुभ्यामि, पातुः ते शुभ्यामि, चरित्रं से शुभ्यामि ।
उ०, य०, काल्यः १।६।३।५
- 41. नमस्त्रांतायाम्, वाक् त आप्यायताम्, प्राणका आप्यायताम्, चरुष
आप्यायताम्, ओऽव' त आप्यायताम् । यसे लुरुं अदास्तिं तसे शुभ्यतु ।
श०, य०, काल्यः १।६।३।५

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

This invisible sky-tree was mentioned in the mythology of all the ancient nations. In Egypt this tree of light was called 'Sycamore,' the Jews called it 'Palm groves,' the Assyrians called it 'Tree-unknown,' the Letts called it 'Sky-tree,' the Yukuts called it 'Seven-storied heavenly tree,' the Vedas named it 'Vanaspati,' the later Hindu scriptures designated it as 'Udumvara, Aśvathva, Khadira and Palāśa.' The Tantras called it 'Kalpa Vṛkṣa, Kalpa-latikā' and Buddhists called it 'Bodhi.'

The sun, who was taken to be the benefactor and friend of humanity, who appeared everyday-riding on this invisible tree of light, and who resuscitated the universe by his arrival, was propitiated over the Yupa a temporal representative of the invisible sky-tree. In India, the words used to indicate the tree from which this seat for the solar deity was made, meant 'the tree of light.' This temporal seat for the sun was 'Yupa' in India, 'Taut' in Egypt, 'Asherim' in Yudea, 'Asirat' in Assyria.

In the Vedic literature as well as in the other religious and mythological literatures of the Hindus the use of this Yupa was elaborately described. In the Brāhmaṇas and in the Rāmāyaṇa we find that in a sacrifice groups of Yugas were used. These groups were made of twenty-one, seventeen, thirteen or five Yugas. The odd number of Yuga in a group was due to the presence, in all of them of a central Yuga.

This central Yuga was with branches and was of the Sakala variety.⁴² It was the seat of the sun and the surrounding Yugas were the seat for the sun's rays. It was called *Vazra-Yuga*.

The word *Vazra* has been used copiously in the Brāhmaṇas. 'The Vazra is threefold,' 'The Vazra is Asva,'⁴³ The

42. वज्रे युपशक्तः । श० ब्रा० १५१४१२

43. वज्रोऽवा अस्वः । श० १११११७ ; ४१६१४२७

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

Vazra is effulgent.⁴⁴ In the above quotations, the Vazra has been used to mean the sun. In the quotation : 'This three-fold Vazra is visible to Devas, but they cannot attain it. This fact that it is beyond our reach, is its first Rupa. The second Vazra-rupa is Sarasvati ; the third Vazra-rupa is the fifteen-fold light. The devas enriched by this three-fold Vazra stem the growth of Asuras,'⁴⁵ we come accross the same meaning of the word *Vazra*. These are its three-fold aspects. The sun is beyond human reach, hence the first manifestation of the Vazra that is unattainable to the man is the sun, the second manifestation Sarasvati means 'full of water.' The sun is also full of water. This water in the sun is called *Soma*. The second manifestation of the Vazra, 'Sarasvati' therefore is the sun. The third manifestation of the Vazra, which is fifteen-fold is the moon. There is another conception according to which the Vazra is sixteen-fold. 'The Vazra is sixteen-fold,'⁴⁶ says the Brâhmaṇas. The moon is the nocturnal manifestation of the sun. Thus we find, that the three manifestations of Vazra coincides with the three manifestations of the sun. Hence, Vazra-yupa means the seat of the Vazra, the sun.

A graphic description of the materials used for a Yupa is found in the Râmâyana. During Aśvamedha sacrifice of Daśaratha twenty-one Yugas were used. Of these, 'Six were made of Vilva, six of Palâśa, six of Khadira, one of Slesmâtmaka, and one of Devadâru.

44. वज्रो वा अभिः । श० १५१४१२

45. (देवाः) एतं विः समृद्धं वज्रं अपस्थन न आप इति । त प्रथमं वज्र रूपं ।
सरस्वतीय तत् द्वितीये वज्ररूपं । पचादशर्च भवति तत् द्वितीये वज्ररूपं ।
एतेन वै देवाः; चिष्ठमृद्गेन वज्रे य एव्यः लोकीभ्यः असुराण् अगुदन्त ।

श० १५१४१३

46. वज्र वोऽर्थोः । ग० १० छ० ११६ । श० १२१४१२

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

In the centre there is a special type of Yupa made of gold, which seems to be for decoration only.' In this description we find that in the days of the Rāmāyaṇa, the people had forgotten the actual significance of the central Yupa. They used it merely for decorative purposes. Nevertheless, that it was made of gold points clearly to its original nature. The lustre of the tree of light was well represented by the lustrous gold.

In the modern times, the group of five Yugas is generally used during Vedic sacrifices, specially in connection with the Vṛṣotsarga. The Vṛṣava is the sun. 'The Vṛṣava of the sky is the revealer of the earth.'⁴⁷ 'Ye Vṛṣava, thou art of the Heavens.'⁴⁸ In this ceremony, too, a faint trace of the ancient conception of the group formed by twenty-one Yugas, is still discernible. The twenty twigs, each one cubit long, of the fig tree offered to the fire of Homa, actually represent the twenty outside Yugas of the group of twenty-one. The fire and the sun being identical, Yugas which are offering of seats to the sun's rays, are offered to the flames of the fire as twigs; thus a faint recollection of the ancient custom is still retained in the Vṛṣotsarga.⁴⁹

The most ancient representation of the invisible sky-tree has been found in the ruins of the buried cities of the Indus valley. The pictographic seals unearthed from that locality, show the figures of the sky-tree. In one seal, a 'branch of a tree with seven twigs is seen. In the middle there

47. उपमो दिवः रजसोः पृथिव्या । RV., 8. 57. 3 ; AV., 20. 143. 9.

48. उपमो दीपवान् असि । RV., 5. 28. 4.

49. प्रादेश्वरय प्रभाणां खदिरपलाशशुराशाम् अन्वतमस्य विश्वति काटिका
गद्धीला तदुपरि हृतज्ञवं दला विश्विद्वयाय प्रजापतिं मनसाज्ञायस्तुष्टि-
मङ्गली लुड्यात् । विश्वतु काटिकाणाम् सूक्ष्म-मध्य-चयन् हृतेन मार्जयति ॥

* पुरोऽप्तव्यम् । ६५-६४

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

are three heads of Unicorn.⁵⁰ The Unicorn, which is the symbol of the sun, represents three stages of the solar deity in the sky by its three heads. The seven twigs represent the seven rays of the sun mentioned in the Brahmanas as : 'That Aditya is the seven-rayed Vṛṣava.'⁵¹ In another seal is seen 'a female goddess, from whose genitals a tree has come forth.' This female goddess is no other than Aditi the mother of bright spirits, who is also the earth. The sun is called Aditya because it comes out of the womb of Aditi, the earth. The tree, that comes out of her genitals is the celestial tree of light over which the sun rises daily.

In another seal we find 'a female deity among the boughs of a tree.' This is the female form of the sun. The deity within a creeper is also the same sun. Thus we see that the invisible sky-tree was also conceived as a creeper by the Indus people.

The eagle in Rgveda is called Śakunta, Śyena, Suparṇa and Garutmān. In the 42nd and 43rd suktas of the fourth mandala of the Rgveda, the god Indra has been represented by a bird form called Kapinjala. Indra is the solar deity, hence, the bird that symbolises him is the symbol of the sun. The 25th and 26th suktas of the fourth mandala of the Rgveda describe the achievements of the Śyena. He brings the intoxicating Havya for Manu and delivers the same to the gods. The Havya here referred to is nothing but the Soma or rain. The Pourāṇic allegorical story of Garuḍa's Amrita-harana, which describes the warfare of Garuḍa with Indra when he went to snatch the Amṛita or nectar from him, arose out of the above

50. Sir John Marshall : Mohenjo-Daro and Indus Civilization, Vol. II, Plate CXII, Fig. 382.

51. स एष छाप्तुद्वयः सप्तरसिंहः डृष्टमः । जै० च० १२८२

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

Vedic conception. It is further said in the aforesaid 27th sukta, that the Śyena, who was put in bondage fettered by iron chains, came out of the bondage by tearing asunder the iron chains. The iron chain is nothing but the night that obliterates the sun's existence from the public eyes. The sun is enchain'd as it were by the night, when its effulgence is kept in abeyance. It comes out of its bondage in the morning and brings the day with it. This anecdote of the Śyena is similar to the story of Osiris of Egypt, who, it is said, was shut up in a box and thrown into the river Nile. The box is the night and the river Nile is the western ocean where the sun sets. The Śyena is also Aditya, because it comes out by piercing the womb of Aditi. Thus says Rgveda : 'The pleasant Śyena is born from the womb of Aditi.'^{51a} In the expression : 'The beautifully feathered Garutmān is the body of the sun,'⁵² the Garutmān is clearly identified with the sun.

The Brāhmaṇas, literature of the Hindus of a later period also maintain the same idea about the Śyena. They say : 'The Soma is the Śyena.'⁵³ 'It pervades the universe assuming the form of Agni and thus pleases the people, hence it is called the Śyena the pleasant.'⁵⁴ 'Prajāpati is the Śyena Garutmān.'⁵⁵ 'The Śyena is Puruṣa.'

The sun was worshipped by a sect of the Aryas as the snake. Its likeness to the snake lies in its coming out in the morning by piercing the womb of the mother

51(a) श्येनः आसाम अदितिः कचो मदाः । RV., 5. 44. 11; श्येनस्य चित् । RV., 5. 78. 4 ; 4. 26.

52. सूर्यं चक्र चवितुः गहत्मान् । RV., 10. 149. 3.

53. यद्यमङ्ग श्येनोऽसीति । चोलो वा एतद चाह । शा० ११।७।८।५ ; गो० पू० ५।१२

54. एव इ वा अधिर्मूला अभिज्ञं लोके संश्यायति । तत् यत् संश्यायति तत्काम् श्येनः । शा० १२।७।८।५

55. प्रजापतिर्वं सुपर्णो गहत्मान् । शा० १४।१।१७, शा० २०।३।२।४

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

earth. This resemblance of the sun with the snake made the Āryas worship the snake as a symbol for the sun.⁵⁶ The R̄gveda says : 'The goldenhaired spreader of light, Ahi, is as swift as the wind. He is spotless and lustrous and is ignorant of the dawn.'⁵⁷ The sun remains ignorant of the dawn, because the dawn flies away before the sun appears in the horizon. These worshippers of the sun as a snake were known as *Sarpa-deva*. The word *Sarpa* means 'one that glides'. The sun's travel from the east to the west reminds one of the gliding of the serpent. Hence, the sun is called a glider or *Sarpa*. The mother of the snake is the earth according to the Brāhmaṇas. Thus we read : 'The Pṛthivi is the queen or the mother of Sarpas.'⁵⁸ 'The sun is to be praised by reciting the 'Sarparajni-Rk.' The worshippers of the snake, the Brāhmaṇas say, are the Devas. These Devas, who were the Āryas, designated themselves as snakes. It was the ancient belief that worshippers of a deity were actually its children. This has been illustrated by the existence of Solar and Lunar dynasties among the Āryas. Those descendants of the sun and the moon actually were the worshippers of those deities. Thus we read : 'The Sarpas are the Devas,'⁵⁹ 'The righteous forefathers are Sarpas.'⁶⁰

The worship of the snake as a solar deity was in vogue in Egypt. The Pharaohs wore the emblem of the sun in

- 56. सर्पदेवजनान् गिर्ज । APC., 6. 12. 4.
सर्पदेवजनेभ्य स्ताहा । AG., 3. 1. 9. 14.
सर्पेभ्यः स्ताहा । APC., 6. 12. 4.
सर्प्यूषजनान् । Vait., 17. 22.
- 57. हिरस्यकिदो रजसो विशारदिष्टुनिवैतह्य भौमीनान् । श्विष्माला उवसो
गवेदा यशस्तीरपास्युमो मुत्त्वाः । RV., 1. 79. 1.
- 58. इयं पुष्टिर्णी वै सर्पराङ्गी । ऐ० ५१३
- 59. देवा चे सर्पाः । सिषालिकं (पुष्टिर्णी) राङ्गी । ते० ११।१।१२
- 60. सर्पान् प्रस्तवजनान् गिर्ज । AV., 11. 6. 16.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

the form of a snake on their crowns. The snake is still worshipped in the lower and eastern Bengal as well as in the Mâlâbâr Coast as the solar deity.

In the first volume of 'The Rgvedic Culture of the Pre-historic Indus', we have seen that the word Aśva has been used in the Vedas and other literatures of the Hindus, to mean the sun. Other references from the Vedas, Brâhmaṇas, Upaniṣads and Purâṇas are given here in the present volume.

In the Rgveda we find: 'By the golden hands of the Aśva ; '⁶¹ 'Aśva is the Uṣâ of the first Aruna'.⁶² The golden handed sun has been alluded to in: 'The golden handed Savitâ';⁶³ 'The beautiful tongued and golden handed Savitâ'.⁶⁴ The hands are the sun's rays, hence the golden handed Aśva and the golden handed Savitâ are the same deity.

The Brâhmaṇas say: "The Aśva has been born of the eyes of Prajâpati".⁶⁵ The Aśva is the charioteer of the Agni's chariot,⁶⁶ 'The Aśva is the most sublime of the paśus',⁶⁷ 'Aśva is the Vazra',⁶⁸ 'Indra is Aśva',⁶⁹ 'That Aditya is Aśva',⁷⁰ 'The Aśva becomes Agni and carries the oblations to the Devas,'⁷¹ 'The Aśva stands on its

- 61. अश्वे हिरण्यपाणिभिः । RV., 8. 7. 27, (This RK could not be traced. It is quoted by the author of the Vedic Concordance).
- 62. युत् । हि बाजिनीवल्पं आद्यादृष्टं उषः । RV., 1.92.15, SV., 2.101.3.
- 63. हिरण्यपाणिः सविता विश्वर्षिणः । RV., 1. 38. 9.
- 64. हिरण्यपाणिः सविता सुभिष्ठः । RV., 3. 54. 11.
- 65. (प्रजापतिः) अदृष्टा अश्वम् । श० १५४२६
- 66. अश्वान् अश्वे रथैरिव । RV., 8. 75. 1.
- 67. अश्वः वा अश्व पश्चालम् । वा० २१४१६
- 68. अश्वो वा अश्वः । श० ४१६१४१२७
- 69. इन्द्रो वा अश्व । कौ० १५१४
- 70. अश्वी वा आदिलोऽश्वः । सै० श० ३८२३१२
- 71. अश्व ह इवा एव (अधिः) भूत्वा देवेभ्यो यश्च वहति । श० ११६११२०

THE ḌGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

three feet.'⁷² The above references point clearly to the solar nature of the Aśva, specially the last reference by asserting that the Aśva has three feet which corroborates the Vedic conception of the sun's three stages of existence in the heavens. In the expression : 'The Aśva is born of the water,'⁷³ we find that this Aśva is not a horse, because the horse cannot be born of water. It is the sun, which arises from the eastern ocean, that is born of water. Hence, Aśva means the sun.

The Yayur-Veda says : 'The Aśva is a big bird',⁷⁴ 'Ye traveller of the sky, Ye Aśva, I am fixing you upon the Yupa for Prajāpati. This act of ours will bring fortunes to the Devas and Prajāpati. Let your strength be useful in the work of the Devas and Prajāpati.'⁷⁵ 'You have acquired omnipotence from thy mother and lordship of the universe from thy father. Thou art Haya, Thou art Arvā, Thou art Aśva, Thou art Vāji, Thou art Nara, Thou art Yaju, Thou art Śiśu, Thou art the pathfinder of the Adityas, Thou art the protector of the cardinal points, Ye Devas, receive the Aśva born of water and offer him sacrifice. Ye Aśva stay here, and be happy; let this place give you peace. Assume your own form in this sacrifice.'⁷⁶ 'Let the crimson complexioned traveller of the sky, Aśva, be

- 72. तत्त्वात् अश्वः विभिः (पदिः) तिष्ठक्षिष्ठति । श० १३।१।७।६
- 73. अपसुर्योनि वा अश्वः । तै० ३।८।४।६ ; अपसुवा वा अश्वः । श० ३।४।३।१८
- 74. अश्वरासीत् हृष्ट वयः । VS., 23. 12. 54 ; TS., 74. 18. 1 ; MS., 3. 12. 99 ; KA., 4. 7.
- 75. स्वगा ला देवेभ्यः प्रजापतये ग्रहण अश्वं भवत्यसामि । देवेभ्यः प्रजापतये तेज रात्मसम् । ल' वधान देवेभ्यः प्रजापतये रात्मतुष्टि । VS., 22. 4.
- 76. विभूर्मात्रा, प्रभुः पिता, अत्मोऽसि, इयोऽसि, अत्मोऽसि, मयोऽसि, पर्वासि, सप्तिरसि, वाजासि, वृषासि, शुभ्रासि । वतुर्णामासि, शिर्णामासि, आदित्यानां पथाचिह्नि देवा आश्वापाता एतं देविष्वोऽस्य भेदाय प्रोचितुं इति । इह रक्ति, इह रम्याम, इह छृति, इह साधृति साहा । VS., 22. 19.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

propitiated by hymns. His rays have revealed the heavens.'⁷⁷ 'The Aśva comes out of the water, it receives the oblation of the Soma and again enters into the water.'⁷⁸ The above quotations speak for themselves.

The Aśvamedha is commonly believed to be the horse-sacrifice with the result that we take the word Aśva to mean 'horse' only. But it will be found to be a mistaken view in the light of what we have already said as regards the real meaning of the word Aśva. Now let us explain the Aśvamedha sacrifice in detail. The Aśvamedha used to be celebrated on the eighth day following the new moon in the month of Phālguna and the ceremony lasted for three or four days. The sowing usually began from the month of Phālguna. The agrarian people were always in need of water. So, the Aryas, who were an agrarian people, propitiated the solar deity for rain. This ceremony of propitiating the sun was called the Aśvamedha. This was a vigil on the Aśva or the sun. From one sun-rise to the other the house-holder waited upon the Aśva with his wife.

The first day of the Aśvamedha sacrifice was spent in making arrangements for the chief rites ; on the second day at day-break the worshipper with his wife commenced the vigil. They waited upon the Aśva or the sun till it sets. At first the Yajmāna and his wife observed the vigil, afterwards when the kingship came into existence a representative replaced the Yajmāna. Thus, during the Aśvamedha of Rāmachandra and Yudhiṣṭhira, their younger brothers were chosen as their fit representatives.

From rising to the setting, the sun's travel in the course

77. शुक्लि ब्रह्मदर्शं चरते परितस्थः रोचने रोचना हिवि । VS., 23. 4.

78. संश्लितो रस्मिना रथः, संश्लितो रस्मिना हयः अपस्तप्सुजा ब्रह्म सीमः पुरगदः । VS., 23. 14.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

of the whole day has been reckoned as a solar year. This solar year was called a Varṣa. The later writers confused this solar with the calendar year. In the expressions : 'After a year he regained his freedom,' 'One year is its life' of the Brhadāraṇyaka, we meet the same idea. Here, the Aśva that lived for one year only is none but the sun. It is absurd to think that the horse has a life time for one year only. Hence the travel of the Aśva throughout a year narrated in the Rāmāyaṇa and the Mahābhārata, is nothing but the allegorical representation of the sun's travel through the whole day.⁷⁸

In the day, when the sun was visible they waited upon him, but at night when there was no sun what could they do? The continuity of the vigil must be maintained. There must be some suitable representative to replace the sun. The sun had its mundane representative in fire.

This lighted fire maintained the continuity of the existence of the solar deity throughout the night. So, they had to wait upon the fire throughout the whole night.

This fire of the night has been mentioned as 'Aśvaka'. Like 'Mānavaka,' a small Mānava, 'Aśvaka' means a small Aśva. The fire is smaller in size and inferior in quality to the sun. Being the mundane representative of the sun it is called the small sun. This small sun is the Aśvaka, the small Aśva. Thus says the wife of the sacrificer: "No one is taking me to the Aśvaka, Suvadrā of Kāmpilya city is sleeping near the Aśvaka."⁷⁹

After spending the whole night in vigil near the fire, the wife of the sacrificer with her husband prays to the sun

78(a) For full particulars of the Asvamedha see Appendix.

79. अस्व, अविकि, अवालिकै, न मा नयति काशन । ससकि अस्वको सुभद्रिष्ठा
काण्डिष्ठा वासिनी ॥ VS., 23. 18.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

at day-break in these words: "Ye the lord of man, ye the dearest of dears, ye the lord of riches, I do invoke thee, my saviour. Ah, the concealer of the sun within her womb, the night, is born. Ye night you are surely born."⁸⁰ Both (Dyâvâ-Prthivi) extended their four feet in the heavens at day-break. Let the powerful Bâjî (Sun) envelop the earth and begin to pour water.⁸¹ '(Ye earth) hold in your stretched lap the Radiator of light, the sun, who resembles the lighted fire. Who is the life in woman (earth) in the form of food.'⁸² Let the Śakuntikâ (Sun) come out of the womb of the earth and begin to tread. Let him kill the darkness and continue to march onward, let him kill the cloud fiend so that the rain may fall in torrents.⁸³ 'Let thy father and mother (Dyâvâ-Prthivi) put you on the top of the tree. Thy father (sky) has driven away the darkness with his fist.'⁸⁴ 'Ye (Dyâvâ-Prthivi) put it (sun) on the high peaks of the mountain and thus relieve yourself. (The child as an infant can be carried in arms. A grown up child cannot be borne. Here the infant sun, as it was rising, was thought as the child in the lap of the sky and the earth, both of which met in the eastern horizon. As the sun grew larger it left the earth. This solar phenomenon has been metaphorically put in

80. गणाणा ला गणपति हवामहि, प्रियाणा ला प्रियपति हवामहि, निर्दीगा ला निर्विपति हवामहि, वसो मम । आहमाजानि गर्भधम् आत्माजासि गर्भधम् ।
81. ता उमी चतुरपादः संप्रसारायत् सर्वे लोके हृषा वाजी रेतोषा रेतं ददातु । VS., 23. 19.
82. उत्तरकृष्णा अवगुर्द दीहि सम अस्ति' चरया हृष्ण् । यः स्त्रीशाम् औष्ठलोजनः । VS., 23. 2.
83. यकासकी शकुनिकाऽहृष्णिति वचति । आहृति गमे पशो निगलाणीति धारका । VS., 23. 22.
84. माता च ते पिता च तेऽप्य' हृष्णस दोहतः । प्रतिष्ठानीति ते पिता गमे सूष्टि' अतेष्यत् । VS., 23. 24.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

this verse. It was as if the parents to relieve themselves of the burden of the grown up sun put him on the peak of a mountain). Like the leaves of the trees in the winter (the darkness falls off from the face of the earth) when he (the sun) went up the midsky.⁸⁵ 'When he comes up by piercing her (earth's) side, he left his small body and assumed a very big one. Like the fish that plays in water contained in the place marked by the feet of the cow, this deity begins to play in the ocean of the sky.'⁸⁶ 'When this round-shaped beautiful god begins to pour water, the mother earth becomes visible by its light.'⁸⁷ 'When from the lustrous (sun) water falls, and the crops grow by drinking it, Śudra, the servant of Arya (begins to rejoice by thinking) 'we shall gather a good harvest.'⁸⁸ 'Dadhikrāba (one that has arisen from the dead), the victorious Aśva, has been thus propitiated by the sacrificer.' Saying this the sacrificer brings out his wife from the Yāgmandapa and says : 'Let our mouth emit sweet fragrance. May we live long.'⁸⁹ Here ends the main ceremony.

Thus we have followed in detail the main functions of the Aśvamedha sacrifice. From the above it is evident that the sacrifice was not a horse-sacrifice as it is now believed by people in general. It is Mahidhar who by twisting the

85. ऋज्ञं मैनसुक्षापय जिरी भार इरङ्गिव । ऋशस्ये मध्यमेषताम् शीति वाते पुनङ्गिव । VS., 23. 26.
86. यदस्या चंहभिद्या क्लघु स्तुहसूपातस्तु । हुक्काविदस्य एवसो गोदके शकुलो इव । VS., 23. 28.
87. यद्वेवासो लक्ष्मान्दं प्रविष्टीमानमाविष्टः । सकृद्वा देहिष्यते नारो सत्य-सर्विसुद्धी यथा । VS., 23. 29.
88. यद्विष्टः यवमति न पुष्ट वडुमन्यते शुद्र यदयंजरः आ न पोषाय धनाद्यति । VS., 23. 30.
89. दधिकार्ये चकारिष्ये विष्ठोर्वस्याविज्ञः, सुरभि नो मुखाकरोम्, प्राणो चायुर्विग्नं गारिष्टत् । VS., 23. 32.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

meaning of the words of the text, makes out his theory of a horse-sacrifice. His interpretation betrays his ignorance of the Vedic literature. Had he turned over the pages of Yâska's Nirukta he would not have explained the passages in this way. The translation of the passages from the Yayur-Veda quoted in the present volume has been done with the help of Yâska's Nirukta and Nighantu. Mahidhara's explanations are so indelicate and obscene that it is impossible to render them in any language. So, it is for the readers to see whether Mahidhara's explanation or the present translation follows closer to the original texts. Besides the wrong interpretation of the passages, three passages have been twice repeated with slight variations in texts as quoted by Mahidhara. The words were so selected that they changed the meaning of the whole sentence and actually lent strong supports to Mahidhara's view. Even if these passages are omitted there will be no break in the continuity of the meaning of the texts. So, it is most probable that Mahidhara, in earnestness to substantiate his theory interpolated those passages into the Yayur-Veda.

A similar custom was observed in Egypt. There the sacrifice was of a bull instead of a horse. It was called 'Apis Bull.' The court ladies and priestesses were honoured with the carnal connection with the sanctified animals. The ordinary women were to be satisfied with the connection with the sacred 'Rams'. It is highly probable that this Egyptian ceremony of Apis Bull and sacred Rams had been grafted upon the ceremony of the Aśvamedha, changing the solar deity Aśva to the horse. The change can easily be accounted for, assuming that the movement of the sun resembles more or less the galloping of a horse. The oblivion of the Vedic rites and consequently the original meaning of the Vedic texts made the later commentators to

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

invent and attach new meaning to the Vedic texts. In this way the actual Vedic significance is completely obscured.

The Aśvamedha sacrifice perhaps survives in the Vāsanti Durgotsav of the modern times. It is a popular belief now-a-days that the Durgotsav is the Aśvamedha of Kaliyuga. Like the eighth day after the new moon or Aṣṭami of the month of Phālguna, the eighth day after the new-moon or Aṣṭami of the month of Chaitra, in which the Vāsanti Durgotsav is performed, is observed as a special day of fastivity of fasting and vigil. In this day the devotee will not take anything and offer prayers throughout the whole day to the mother Divine. In the Vāsanti Durgotsav it is the main day of worship. In this respect it may be compared with the Aśvamedha sacrifice, in which also the eighth day after the new moon was deemed the most important day of vigil.

In the matter of preservation of fire at night in the Vāsanti Durgotsav, which is one of the most important function of the ceremony, the Vāsanti Durgotsav resembles the Aśvamedha sacrifice. Because, the practice of keeping the light ablaze throughout the night in a ceremony is still observed by the Hindus in the Durgotsav. They keep keen vigil all the night on the light, lest it goes out, because extinction of the light forebodes evil omens.

The main problem of the identity of the two is the month of the ceremony, while Vasanti Durgotsav is observed on the eighth day after the new moon of Chaitra, the Aśvamedha sacrifice was observed a month earlier, that is in the month of Phālguna. This difference of one month in the observation of the ceremony was due perhaps to some astronomical change. Prof. Sreepada Mukherjee, of Rajendra College, Bengal, brings out a calculation relating the solstices of the sun and writes : "Besides daily motion, the sun is moving eastward each day. The path which the sun follows amongst the fixed stars in course of

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

a year is called the 'Ecliptic'. This ecliptic cuts the equator at two points called the 'First point of Aries' and the 'First point of Libra.' These two points are called equinoctial points, because, when the sun is at either of these points, day and night are equal all over the world. The sun passes through the first point of Aries on 21st March each year and this first point of Aries is called the Vernal equinox (day of महाविशुव संकालित). The sun passes the first point of Libra which is known as the Autumnal equinox on the 23rd of September.

The two points on the ecliptic midway between the two equinoxes are called the solstices. These are therefore 90° from either equinox (the ecliptic being 360°). One of these points is northernmost from the equator and is reached by the sun on the 21st June. On this date the northward motion of the sun ceases and the southward motion commences. This is known as the Summer solstice (इश्वरायन). The southernmost point is similarly reached by the sun on the 21st December (उत्तरायण).

The first points of Aries and Libra however are not fixed. The celestial equator is slowly shifting its position backward in such a manner that its points of intersection with the ecliptic that is Aries and Libra move in a retrograde manner. This retrograde motion of the equinoctial points, make the sun meet them earlier, i.e., equinoxes precede their due time each year. This is known as precession of the equinoxes.

58°72685 is taken as the mean value of the precession for a Khandakhandyaka year. Followers of Aryabhatta adopted 59°5 per year as the value of the precession. According to Manjula (932 A. D.) 59°9 is the rate of precession. According to Viṣṇucandra as quoted by Pṛthudaka in

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

his commentary on Brahmasphuta Siddhānta the mean rate of annual precession is $56''8$ The current Siddhāntas which are of unknown origin accept the mean rate to be $54''$, per year.

For details see 'The Khandakhandyaka' of Brahma-Gupta. Translated by Probodh Ch. Sen Gupta. (Cal. University publication, Page 79).

As a result of this motion (precession) the 1st of Aries of the Vernal equinox is no longer in the constellation of Aries but has moved back into the constellation of Pisces and in 600 years nearly it will be in the aquarius.

Also as a result of this movement of the celestial equator there is a change in the direction of celestial Pole, consequently different stars become Pole star at different times.

Due to precession of equinoxes the sun will take nearly 26,000 years to come to the same point where it is to-day i.e., after 26,000 years, the Vernal equinox will be on the 21st March.

If we take for granted that the Vāsanti Durgotsov and the Aśvamedha are one and the same thing then, according to this calculation, we arrive at the conclusion that the date of Aśvamedha due to equinoctial precession, by a retrograde motion of the sun has arrived at the month of Chaitra at present. According to this assumption we find that the sun has covered eleven months in the course of its retrograde motion. We have seen that the sun takes nearly 26,000 years to reach the same point from which it retrograded; hence, by calculation we find that it has travelled nearly for 23,833 years. So, the sun began its march 23,833 years before this date, that is on 21,889 B. C. This date of commencement of the sun's journey may be assumed as the time when the Aśvamedha sacrifice was in vogue.

Coming to the Upaniṣads, we find the reference of

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

the Aśvamedha sacrifice in the Brhadārṇyaka Upaniṣad. Here Aśva has been mentioned as an invisible animal with its different limbs in the sky. This animal has two feet. The two-footed animal, surely is not the horse. We have seen before that the Brāhmaṇas tell of an Aśva with three feet. These two-footed and three-footed animals cannot be the horse. Moreover the Brhadārṇyaka Upaniṣad says : 'The day is born before the birth of the Aśva, which is born in the eastern ocean, the night is born after him, the night is born of the western ocean (after the sun sets there).'⁹¹ The day is born before the birth of the Aśva or the sun because, before the sun becomes visible it is the time of dawn. The night is born after the Aśva or the sun dives in the western ocean. It is after the sun-set that darkness of night appears. 'The samudra is a friend as well as the birthplace of the Aśva.'⁹²

'Being kept in the' dungeon he thought within himself. After an year he regained freedom.⁹³ This passage bears the same meaning as the Śyena sūkta explained before. The sun who was put in the dungeon of the underworld in the night, regained his freedom in the morning. Moreover this passage proves the theory 'The sun's one year is a solar day.'

'This is the Aśvamedha that gives light. One year is its life. It is the fire. It is the Arka. These realms (heavens and earth) are its self. Hence this Aśvamedha is Arka. It does not die because death⁹⁴ is its self.'

- 91. अङ्गवृं अङ्गं पुरस्ताऽग्निभावजायत, तस्य पूर्वं समुद्रे योनिः । राविरेण्यं पशान्तहिमान्वजायत, तस्यापरे समुद्रे योनिः । ड० आ० १११२
- 92. समुद्रं एवास्य वर्णुः समुद्रो योनिः । ड० आ० १११२
- 93. तमगवरुङ्गं वामन्तत । तं संवत्सरस्य परस्तादामनं आलमत ।
ड० आ० १११०
- 94. एष च वा अश्वसेषी य एष तपति, तस्य संवत्सरं आकाऽयमधिरक्षं सर्वेषां सौकां आकां तावेतावक्तःश्वसेषी । ** पुणर्वर्त्युँ जयति । मैर्गं स्त्रयुमवाप्नोति स्वरुपस्य आकां भवति * * । ड० आ० ११२५

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

In the Purânas the origin of the Aśva has been very nicely narrated. It is told that the Aśva was born when the Kṣirode ocean was churned by the Devas and Asuras. The second product of the churning was the Aśva. The churning of the Kṣirode ocean is the phenomenon of the storm, cloud and rain. The sun is covered by the cloud. After a heavy shower of rain the sun is again visible. The rain is called the elephant. Hence the first product of the churning, the elephant Airâvat, is the rain. After the rain the sun is visible, hence the second product of the churning, the Aśva Uchaisravas, is the sun. The third product is Lakṣmi. Lakṣmi is the deity of paddy. It is rain that helps the growth of paddy, hence the third in the series is the paddy-goddess Laksmi. The fourth is Dhanvantari. Dhanvantari is the physician. It is after the herbs grow that a physician can cull medicine, hence, Dhanvantari the fourth product of the churning, is the medicine.

The Pauranic story of the Aśvamedha sacrifice of king Sagara is also a solar allegory. There it is told that, Indra stole the horse of king Sagara and concealed it in the underworld. The sons of Sagara dug the earth and found the Aśva roaming in the underworld. The stealing of the Aśva is nothing but the allegorical representation of the phenomena of the sun-set and its roaming in the underworld is the sun's sojourn in the night beneath the earth.

From all what the scriptures say about the Aśva and Aśvamedha, we come to the conclusion that the word Aśva was used in the ancient literatures of the Hindus to mean the sun and not the horse.

The Asvamedha of Maharaja Sagar, the stealing of the horse by Indra and its stay in the underworld is allegorical reparation of the sun's-setting.

As a deity of worship, the fire or Agni was supposed to be the next in importance to the sun. Agni's sacredness

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

to the Aryas was due to the special favours conferred upon them by the deity. From the beginning when the Aryas stumbled upon the discovery of ignition of fire, it was looked upon as something divine. The fire keeps off cold,⁹⁶ hence, according to the Vâjasaneyâ Samhitâ : 'The fire is the medicine for the chill.'⁹⁶ It being installed round the house, the wild animals as well as evil spirits that roam at night were all scared away.⁹⁶ He, whose favour mitigated cold, gave them the pleasure of eating cooked food and removed the dread of night,⁹⁷ was regarded by the Aryas as : 'The powerful house-holder,'⁹⁸ 'The king householder'⁹⁹ and 'Hotâ.'¹⁰⁰ In fact the fire was looked upon as the real householder and the husband and wife as his servants.

Like the sun the fire is called the Paśu,¹⁰¹ because, like the sun it also dispels darkness and makes things visible. As the sun dispels the darkness and brings the day, so the fire dispels the darkness and illumines the night. Thus by revealing the night it has also become a Paśu or seer. As the sun is worshipped in day-time, so the Agni having similar functions is worshipped in the evening. 'While the sun is worshipped in the day, the fire is worshipped at night,' says the Brâhmaṇas.

The fire was kept perpetually burning in the hearth by the house wife. It was never allowed to be extinguished. In the morning before the commencement of the daily

95. (i) अपिवै दिवस्य मेवजाम् । TS. 3. 6. 5. 4.

(ii) आधिहिमस्य मेवजन् । VS., 23. 10. 6 ; TS., 7. 4. 18.

96. अपि सहस्रात् विष्वर्ण्णि रक्षाति सिद्धति । RV., 1. 79. 12.

97. अपि रक्षाति निहन्तु । AV., 7. 114. 2.

98. अपिहोता गद्यपति सुवीर्यम् । RV., 10. 122. 1.

99. अपिहोता गद्यपति स राता । RV., 6. 15. 13.

100. अपिवै देवाणा होता । AI., 1. 28.

101. (i) अपिहि देवाणा पशु । AI., 1. 5.

(ii) अपिःपश्चरासीत् । AI., VS., 23. 17.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

sacrifice, the wife revived the fire from the ashes. In other words, the wife roused the fire from its sleep in the morning and took it to the place of sacrifice. This process of reviving 'the fire from the ashes' in the morning was in vogue in India previous to the introduction of safety matches. The fire was kept in a small oven with the help of husks. The husks burnt slowly and at night a weight was put over them so that the husks might not be scattered away by the wind. There was another process by which the fire could be procured. It was produced by churning. In the process of churning, the wife churned the spark of the fire out while the husband held tightly the Arani or the piston.¹⁰³

Owing to the similarity in functions of the sun and the fire the Aryas were persuaded to interchange their names as expressive of both of them. Thus the sun was sometimes called the fire and the fire, the sun. 'Agni is Savitā',¹⁰³ 'He who is called Varuṇa, is Agni',¹⁰⁴ 'The Aditya is Agni'¹⁰⁵ are the references in which the two terms fire and the sun are interchangeable. Further 'Agni as a bird, soars in the sky' is the Rgvedic reference.¹⁰⁶ The Yajur-veda also remarks : 'That sun in the sky is the Agni.' The later literatures of the Aryas, the Brāhmaṇas say : 'He, who was Rudra, is Agni,'¹⁰⁷ 'Agni is the Arka,' 'The sky is its (Agni's) birth-place.'¹⁰⁸ By the expressions : 'The

102. Atri Samhitā, Ch. XIII, 8 ; Kātyāyana Samhitā, Ch. VIII, 4.

103. अग्निरेव सविता । GB., I. 2.

104. यो वै वरुणः सोऽपि । Sat. Br., 5. 2. 43.

105. अस्मी वा आदित्य एवोऽपि । Sat. Br., 6. 4. 11.

106. अधिष्ठ वयो अन्तरोक्ते पतनात् । RV., 10. 80. 5.

107. योऽपै रुद्रः सोऽपि । Sat. Br., 5. 2. 4. 13.

108. योवर्णवस्तु परमं/अन्तः । Sat. Br., 9. 2. 3. 39.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

fire lives in the sea (Samudra) in the Vedas¹⁰⁹ and 'The Agni came first of all, from the water,¹¹⁰ 'The Parjanya is the Agni' in the Brâhmaṇas,¹¹¹ we find the same picture of the Agni as we found of the sun. Thus, the similarity in the nature of the two gradually did away with the difference between the two and they were thought to be one and the same god in two forms, one half of which resided in the heavens and the other half in the earth. The earthly representative of the sun, the fire, received the offering meant for the sun. It was the mouth-piece of the sun and gradually became the mouth-piece of all gods. The Agni was called the Purohita of the gods, because it received the first oblation in all the sacrifices.¹¹²

The Dyou is connected with the sun. It is the sky. It is conceived as the father of the solar deity. It is a great lake according to the ancients, from which the rains come. It is the habitat of the rain or the Soma. In the Purâṇas it is called the Kṣirode Sâgar. The Egyptians called it the Tseret Lake. The word Tseret is the corrupt form of the Sanskrit word 'kṣirode' pronounced as Xirode. 'The sky is raining',¹¹³ 'The sky pours rain by the mâyâ of Asura' says the Rgveda. The Yayur-Veda says : 'The sky is the ocean'¹¹⁴ and the Brâhmaṇas say: 'The ocean is the sky.'¹¹⁵

Connected with the Dyou as the mother of the sun is the Pṛthivi. She is Aditi, the divine Virgin.¹¹⁶ The birth of the

109. अग्निं समुद्रं वाससम् । RV., 8. 102. 4 ; 5 ; 6.

110. अग्नेऽहं वा एव प्रथममाजगाम । Sat. Br., 9. 2. 3. 39.

111. पर्जन्यं वा अग्निः । Sat. Br., 14. 9. 1. 13.

112. अग्निर्बाणं पुरोहितम् । AI., 8. 27.

113. द्यादृशं वर्षयताम् । RV., 5. 63. 6.

114. द्यौ समुद्रः । VS., 23. 48.

115. आपो वै द्यौ । Sat. Br., 6. 4. 19.

116. (i) अदिति अक्षिहृषपता । KS., 1. 11.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

sun is ascribed to immaculate conception in hers. The allegorical stories of all divine virgins and those of immaculate conceptions originated therefrom. It is the Aditi who bears the sun by immaculate conception and then brings forth all life in the universe by the embrace of her son, the sun.¹¹⁷ She is birthless.¹¹⁸ She is the night.¹¹⁹ From her Dakṣa is born.¹²⁰ This Dakṣa is Varuṇa, the sun.¹²¹ She is the cow and the fire (sūn) is her calf. From her are born Devas, Gandharvas, Manuṣyas, Pitṛs, Suras, and all the creatures, hence she is the mother of all. She is Medini, Mahi, Mahati, Sāvitrī, Gāyatri, Jagati, Urvi, Pr̥thivi, Bahulā, Viśvabhuṭā, Katamā, Kayā, and Vaśistā. She is one of the double deities the Dyāvā-prithivi.¹²²

The Soma is a very familiar word in the Vedas. In a Vedic sacrifice as we have seen before, the Soma played a very important role. It formed the main offering and the gods were satisfied in a Yajña by the offerings of the Soma. The Soma was a creeper the exact description of which is not found in any scripture.¹²³ In the later Vedic period, this creeper gradually became scarce and in the time of the Brāhmaṇas, the use of the Soma-juice was abandoned and the wine or surā was offered to the gods instead. At the time of the Yajur-Veda the creeper was brought from

(ii) आदिति आसन् अस्त्रिपता । MC., 12. 3. 24.

(iii) आदितिरसि अस्त्रिपता । APC., 2. 6. 1.

117. आदिति: पुत्राः सुकर्णानि विचाः । AV., 13. 2. 9.

118. आदितिर्ज्ञनिष्ठ । RV., 10. 7. 2. 5.

119. आदितिर्गौदिवा पश्म अदितिर्गौमहया । RV., 8. 18. 6.

120. अदिते: दद्य अजायत । RV., 10. 72. 4.

121. वह्यो वा इष्टः । Sat. Br., 6. 5. 2. 20.

122. आदितेऽवा गत्वर्य मनुष्याः पितरः सुराः, तेषाम् मर्बूतानाम् माता, मेदिनी, महती, मही, सावित्री, गायत्री, अगती, उर्वी, पृथु, वटुखा, विश्वभूता, कदमा, काशा, वा सर्वेति, अद्वैतिं विशिष्टाः । TA., 10. 21. 1.

123. सीमः द्विष्टीना अस्त्रिराजः । GN., 1. 17.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

outside by foreigners. These foreigners came in the season of sacrifice and opened stalls in front of the arena of sacrifice. In the Rgveda, the ninth Maṇḍala deals exclusively with the Soma and it is called the Soma-maṇḍala. The elaborate process of preparing the Soma has been mentioned there.¹²⁴

The word Soma has been used in the Vedas in other senses as well. It also meant the rain. As such it was conceived as the daughter of the sun. 'The Soma is the daughter of the sun'¹²⁵ says the Rgveda. It was also called the wife of the sun. She is called Gouri¹²⁶. Gouri, in the Purāṇas, is the wife of the Śiva, who is the solar deity according to the scriptures. The Soma was called water,¹²⁷, which allegorically was put for the semen of the powerful Aśva.¹²⁸ The Soma again has been conceived as the solar deity and it is called the Rudra and Indra in the Rgveda¹²⁹ and the Viṣṇu in Satapāṭha Brāhmaṇa.¹³⁰

The Soma has been used in different senses. It means the creeper, the juice, the rain, the sun, and the energy of the sun.

There is mentioned a snake deity in the Vedas which represents the cloud. It is the Ahi.¹³¹ The Ahi as a cloud fiend obstructs the rain of the Kṣirode ocean to fall on

- 124. For the particulars of preparation of the Soma, see the author's 'Rigvedic Culture of the Pre-historic Indus', Vol. I, p. 59.
- 125. सोमं सूर्यस् दुहिता । RV., 9. 1. 6.
- 126. सोमो गौरी । RV., 9. 12. 3.
- 127. सोमः पद्मः । Sat. Br., 12. 7. 3. 13.
- 128. सोमोव रथ अवस्थ रेतः । Tai., 3. 9. 3. 5.
- 129. (i) सोमो रक्षाः । RV., 9. 74. 3.
 (ii) सोमः इग्नेश । RV., 1. 18. 5.
- 130. शो वै विष्णु सोमः सः । Sat. Br., 3. 3. 4. 21.
- 131. अहिन् यत् डबम् अप विविं समे । RV., 6. 20. 2.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS.

the earth. Hence, Indra, the solar deity kills it¹³² and the rain begins to falls on the earth.

The discussions in the foregoing pages show that the main god of worship among the Vedic Aryas was the sun. He was worshipped in the time of the Vedas, in the time of the Upaniṣads and the Purāṇas and he is still worshipped by the descendants of the Arya people. His name has been changed and multiplied, it is true, but he remains the same.

He has lost his clan characteristic in later ages, and has become a universal deity of worship among the Aryas. First he was called the Soma and then the Savitṛ. As the Savitṛ he is now the only universal symbol for the Saguṇa Iśvara among the modern Hindus. During the Puja ceremony of any god if his meditation (आनन्) be forgotten, the repetition of the Gāyatri verse and meditation on the sun fulfil the purpose, and the meditation of the effulgence of the sun corrects the forgotten Dhyānam (आनन्) of all gods.

No worship or ceremony is complete without first offering worship to the sun. In modern times, Ganeśa, has absorbed all the solar attributes and the first offering is now offered to him.

The modern orthodox Arya people offer Arghya to the sun just after the daily bath. Before the commencement of all worship this Arghya to the sun is compulsory. Even, before the worship of Ganeśa begins, the sun is offered the Arghya.

Many sins and vices are expiated by seeing the sun and offering an Arghya to him. Thus we find what a great influence the sun exerted in the days of yore and is still exerting over the Arya society.

132. अस्मिन् वदेष्य मध्यम् विद्यतः । RV., 4. 17. 7.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

In the Vedic rituals, the wife holds a very important position. She is equal to her male partner. The woman, married or unmarried is venerated in the Arya society. Swâmi Abhedânanda deals with the facts and gives graphic description of the position of women in his well-known book 'India and Her People'. We quote the following passages from his book : 'The wife and the husband being the equal halves of one substance, are equal in all respects. Therefore both would join and take equal parts in all works religious or secular.' He further adds : "The Hindu legislator gave equal rights to man and woman by saying : 'Before the creation of this phenomenal universe the first-born Lord of all creatures divided his own self into two halves, so that one half should be male and the other half female.' This illustration has established in the minds of the Hindus the fundamental equality of man and woman. Just as equal halves of a fruit possess the same nature, the same attributes and the same properties in equal proportion, so man and woman being the equal halves of the same substance, possess equal rights, equal privileges and equal powers. The idea of equality of man and woman was the corner-stone of that huge structure of religion and ethics of the Hindus which has stood for so many ages the ravages of time and change, defying the onslaughts of the short-sighted critics of the world."¹³³

In all activities, secular or religious, the woman enjoys equal right with man in the Arya society. In a sacrifice, she holds the office even of the Brahman.¹³⁴ The Brahman, in a sacrifice, weilds a great authority. He dictates and

133. Swâmi Abhedânanda : *India and Her People*, Pp. 254-255.

134. स्त्री हि वस्ता वसूविषः । RV., 8. 33. 19.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

supervises the rites, sets right the mistakes that might creep in the rites and his decree is final. Even this highest office is not denied to her. She wears the sacrificial thread and goes to the house of the Guru for education. She is not prohibited from studying the Vedas. Her rightful claim to become a Ṛṣi is never denied because of her sex and not unoften, we find her composing Vedic hymns. During the ignition of fire she helps her male partner to churn the fire out. In a marriage ceremony it is she that performs the Yajñā. She offers oblations to the fire for Aryaman, Varuṇa, and Puṣaṇa and craves their grace for the long life of her husband. Thus she prays: 'Let Aryaman be propitious to loosen the grip of death from this Deva (husband).' 'Let Varuṇa be propitious to loosen the grip of death from this Deva'. 'Let Puṣaṇa be propitious to loosen the grip of death from this Deva.' We have seen before that in Aśvamedha and other sacrifices the wife is equal in status to her husband in the performance of rites. Thus we see that the woman was revered and respected in the time of the Vedas. She takes her seat always to the right side of her male partner. In the modern Hindu rites her position to the right side of her husband is not observed, save and except at the time of marriage. At the time of Yajñā, in a marriage ceremony the wife sits by the right side of her husband. But as soon as the sacrifice is completed she is taken to the left side. This is a mimicry of the ancient Vedic custom which still prevails amongst the descendants of that glorious Vedic people who gave equal rights to their wives.

Thus we find that the Aryas actually worshipped the forces of nature. The evolution of the religious conception brought out the last stage of development about which we have said so much. But the final stage ^{was not} reached at once. It was reached by

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

a gradual process of evolution. In the beginning they had but one God, the Varuṇa. The Varuṇa is the sky. The sky pours water and brings life in the vegetation. The sky holds the sun, the moon and the stars. It brings the day by bringing the sun out from beneath the sea. So, the Varuṇa or the sky was adored as a great deity. In the next stage of evolution we find the pantheon comprises of two gods, the Varuṇa and the Mithra.

The Mithra is the sun. The usherer of the day and giver of light and life, the sun, came to be recognised also as a powerful deity. From this time onward, the dual deity Mithra-Varuṇa came to be a very favourite god of the Aryas. The sun comes out by tearing the side of the earth. Hence, the sun has its mother in the earth. In this way the earth was also included in the pantheon of gods. This time the sky or the Varuṇa was separated from the Mithra and attached to the earth. So, in later literature we meet the word Dyāvā-Pr̥thivi in place of the Mithra-Varuṇa. This dual deity Dyāvā-Pr̥thivi came to be recognised as the parents of the sun. In the next stage of evolution we get two other additional deities, the fire and the water added to the pantheon. In our previous discussions we have found that the sun and the sky had dual functions. The sun was recognised both as the fire and the sun, and the sky was both the sky and the reservoir of water. Later this dual function was separated and two separate deities, the water and the fire appeared. Thus we come upon the last phase of the evolution of the Vedic gods.

This evolutionary process has a very close resemblance to the conception of the evolutionary process of the universe. The Chāndogya Upaniṣad says that the universe is made out of three elements, the earth, the sky and the light¹³⁵ which

135. विति (Earth), अप् (Sky), तेज (Sun).

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

are the same as the Dyâvâ-Pr̥thivi and the sun of the Vedic pantheon. Moreover, the later evolutionists who propounded their cosmological theory with the help of five elements, declared that the five elements are included in the three of the Chândogya Upaniṣad. Thus we find that the theory of evolution of the universe and the evolutionary process of the Vedic gods ran parallel. Though it may seem very bold, we may also infer that the evolutionists copied the Vedic idea of the evolution of deities.

CHAPTER II

THE TANTRAS (THE SCRIPT)

We have seen that the Vedic rites could be performed by all, irrespective of caste, creed, nationality and sex. Now we shall see that the same Vedic conception of equality is handed down to the Tantras. The observance of the Tāntric rites is not restricted to caste, creed or sex. All the qualified non-dualists and dualists except the non-dualist Vedāntins, follow the injunctions of the Tantras in their religious practices. Practically speaking, Tantricism has saturated all the spheres, social, religious and political. Nearly all the rites of the modern Hinduism are enjoined by the Tāntric injunctions. Thus we see that the Tantras are still dominant in the modern Hindu society.

The revival of the Brāhmaṇical cult in the post-Buddhist age did away with many Vedic customs. In its social reform, it turned the woman from her honourable place in home, made her a slave to her male partner, refused her the right to study the Vedas, to participate directly in a sacrifice, and it also denied equal rights in the Vedas and the Sāvitṛ Dikṣā to people in general. In fact, the whole country was de-aryanised. In this crisis great spiritual giants arose to save the Ārya society from a complete break-down. In the south arose Madvāchārya and Rāmānuja and in the north Sri Chaitanya. They gave a great impetus to the movement started by the Tāntricas and reclaimed all the people that were unclaimed by the pioneers of the Brāhmaṇical revivalists. They conferred the name of the supreme God on those people in way of the Dikṣā and showed them the way to perfection and highest spiritual illumination. A new life

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

was infused into the Hindu society. The influence of these great saviours had so much effect on the society that the orthodox Vedic people could not stand aloof from the great tidal waves of reforms and were forced to embrace the cult of these great saviours which appeared to them as the only path to reach the highest illumination. In this way the Dikṣā gained ground and initiation in the Sāvitṛ remained only as a way of worship subordinate to it. In the modern Hindu society the Vedic initiation in the Sāvitṛ is observed among upper class people practically as a mark of caste distinction. Every one who is initiated in the Sāvitṛ takes to one or the other form of the Tāntric Dikṣā. From this it follows that the modern Hindus believe that the Sāvitri Dikṣā cannot confer the highest illumination, thus turning the Sāvitṛ Dikṣā only to a social custom. The difference between the Vedic and the Tāntric Dikṣā as we have seen, lies in the sectarian nature of the Vedic and the universal and all-embracing nature of the Tāntric conceptions. This universal aspect of the Tāntric Dikṣā has a great effect on the Hindu society. It has regulated the social and political life of the Hindus and has brought within the Ārya fold all those who were unclaimed by the latter reformers of the Hindu society.

We have seen that the Tāntric way of worship, by doing away with the prejudice of caste, sex and national bias has actually reinstated the Vedic conception of equality. In this respect the religious injunctions of great spiritual giants are the same. Moreover, the ceremony of the Dikṣā, as ordained by the Tantras, resembles the ceremony of initiation into the Sāvitṛ. Thus from all points of view we find that the Tāntric way of worship is not a rival to the Vedic rites, it is rather a new and reformed way of practising the Vedic rites. In our study in the Tāntric deities we have found in the first volume of 'The Rgvedic Culture of

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

the Pre-historic Indus' that the Tantras have incorporated the Vedic rituals and the worship of the Vedic deities in different names. In this respect the Tantras and the Vedas profess the same Ārya-culture. In other words, the Vedas still predominate in the Hindu society in the name of the Tantras. This conclusion is corroborated by the Prāṇatoṣinī Tantra when it writes : 'The Vaidikas and the Tāntricas are but two Śrutis (Vedas).'

In this connection we hinted at a secret language of the Tantra, now lost. So, we may say that the Tantras are the Vedas written in a code language made of cryptic mono-lettered words. This language of the Tantras has really frustrated all efforts in understanding the Tantras. So before we can enter into the wilderness of the Tāntric words we must recognise them well.

The mono-lettered words of the Tantras are actually pictures. These pictures represent specific sounds. In this respect these pictures are actually the alphabets of the Tāntric language.

The alphabet is the symbol or the picture of a sound. In the beginning there was only one sound undifferentiated and unintelligible. It produced a monotonous tone like voices of beasts. Gradually with the evolution of the society the sound became two. In this stage the monotony of a continuous sound was broken. Then appeared a third sound, then fourth, fifth, sixth and lastly the seventh.

The Vedic Āryas used at first two sounds in reciting the hymns to the god. These two were called high and low, the *Udātta* and the *Anudātta*. These two notes gradually gave rise to a third note called the *Svarita*. At this time people chanted the Sāman hymns in this trichord. Then with the gradual evolution of the society appeared the fourth and the fifth notes. About this process of evolution Mr. Popley says : 'The Sāman chant pivoted on two

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

notes called the Udâtta and the Anudâtta. In course of time the interval between these are established as a fourth. Then later, the notes of this tetrachord received distinct names. The highest was prathama, then dvitiya, tertiya, chaturtha down the scale. These names are found first in the *Rkprâtisâkhya*. Later a note called Svarita is also mentioned.¹

The Vedic divisions of sounds have been incorporated by the Tantras, Grammarians and Musicians in their literature. The Tantras have taken up the last phase of evolution of the sound referred to above and maintained that sounds were actually divided into five groups. The Grammarians have divided sounds in three ways. They only mentioned the Vedic division of the sound into three, making two other new divisions which have no connection with the Vedic. The post-Vedic musicians divided sounds into seven and followed the Vedic way of division.

The Tantras divide the sound into five groups. These groups are formed according to the sound relating to the five Vedic deities, Marut, Agni, Pṛthivi, Apa and Dyāvā. The author of the *Tantrasâra* mentions the following division of sounds :

1. H. A. Popov : *The Music of India*, p. 27.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

Tântric division of sounds

सूर्य Sun	अग्नि Fire	धृति Earth	चम Water	व्योम Sky
अ आ	ए औ	उ ऊ	ऋ ऋ	उ
ए	ऐ	औ	औ	ऐ
क	ख	ग	घ	क
च	छ	ज	ঝ	চ
ট	ঠ	ঢ	ঢ	ণ
ত	ঘ	ধ	ধ	ন
ঘ	ঘ	ঘ	ঘ	ঘ
য	ৰ	ৱ	ৱ (w)	শ
ষ	৷	—	স	হ

At the time of Pâñini, the celebrated Grammarian, the division of sounds according to the Tantras and the Vedas was partly lost. Pâñini mentions only the third stage of evolution of the Vedic sounds. He speaks of two other new divisions of sounds. Sounds were divided into three distinct heads according to pitch, or measure, place of utterance and nature.

Thus according to pitch, sounds have been divided into *Udatta*, *Anudatta* and *Svarita*. According to place of utterance sounds have been divided into six groups. The *Kaṇṭhya* is the sound produced from the throat, and the *Tâlavya* from the *Tâlu* or the roof of the mouth. The *Murdhyâ* is produced by the touch of the tongue in the laryngeal opening. The *Dantya* is produced by the touch of the teeth. The *Ostiya* is produced with lips. According to the nature of sounds there are four divisions, and they are the *Svara* (vowels), the *Vyanjana* (consonants), the *Antastha* (intermediate), and the *Uṣma*. From the above it is evident that the Grammarians have preserved very little of the Vedic division of sounds.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

The modern science of music traces its origin back to the Sāmaveda. The Sāmaveda is a collection of the Sāmanas which are nothing but the tune or notes, sung to the words. But some of the ancient commentators like Sāyana and others conceived that the notes or the Sāmanas have originated from the Rk or the stanzas. These stanzas of the Rgveda came to be termed as the *yonis* or the mother of tunes. The Sāmaveda is a collection of 585 *yonis* and these *yonis* or the single stanzas were sung in the Sāmans or notes. But the Saṅgita Ratnākara in its effort to trace the origin of sounds to music, maintained that all sounds arose first from an undifferentiated sound of the sky. This undifferentiated sound evolved gradually from one to two, then three, four, five, six, and lastly to seven. These seven divisions are called the Ārchiķa,¹ Gāthika, Sāmika, Svarāntara, Ouḍava, Śāḍava and Sampurna. It further maintains that the first four divisions of sounds are lost. In describing the nature of sounds of seven notes, the Saṅgita Ratnākara invented a very peculiar way of putting them. It mentions the names of seven animals, the sounds of which represent the one and each note.² In this respect the Saṅgita Ratnākara is not the isolated traveller. The Nāradi Sikṣā, the Saṅgita Mākaranda, the Brhaddeśi and others also described the seven notes in this way long before the compilation of the Saṅgita Ratnākara. We find in the Nāradi Sikṣā: 'The peacock sings Śāḍaja, the cow Rṣava, the goat Gāndhāra, the krouncha Mādhyama, the cuckoo Panchama, the aśva Dhaivata and the elephant sings the Niṣāda note.'³ The quoted verses of the ancient writers on music were written in a metaphorical language. They meant something which is not intelligible

1. This Archika is another name of the Sāmana which is the collection of Rks.

2. Saṅgita Ratnākara, 1.46-47.

3. Nāradi Sikṣā, 1.5-4

THE RVEDIC CULTURE OF THE PRE-HISTORIC INDUS

from the words of which they are composed. Until now the actual meaning of the verses could not be explained by any musician. We tried to decipher the meaning of these verses with the help of the Tantric codes and are taken aback to find a new and hidden meaning in the verses, which remained unknown for centuries. From the Tantric clue we find that the aforesaid animals actually represent the five Vedic gods, sun, fire, earth, water and sky, and they may be deciphered in the following way:

The sound of the animal	Musical note	The Tantric code	Explanation of the Tantric code
Peacock मण्डूर्	Śaḍaja षडज	La ल	Earth पृथिवी
Bull वृष	R̥ṣeava ऋषेवा	Śa श	Sky आकाश
Goat अज	Gāndhāra गान्धार	Ai ऐ	Fire अग्नि
Sārasa (Aquatic bird) सारस	Madhyama मध्यम	Sa ष	Water अप्
Cuckoo कोकिल	Panchama पञ्चम	Pa प	Sun महत
Asva अश्व	Dhaivata धैवत	Visarga ः	Sun महत
Elephant इल्ली	Niṣāda निषाद	Śa श	Sky आकाश

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

From the above chart we find that the Tāntric division of the sound reappears in the musical science. The authors of the Saṅgita Makaranda and the Saṅgita Ratnākara also divide the sound in the above manner with the difference that in place of the cuckoo of the Nāradi Sikṣā, the chātaka has been mentioned in the Saṅgita Makaranda and the Saṅgita Ratnākara. The Aśva of the Nāradi Sikṣā has been replaced by the frog in the Saṅgita Ratnākara.

This evolutionary process of the musical notes is very much the same as that of the Vedic deities in the Ārya society. In the beginning when there was only one sound, it was the undifferentiated sound of the sky, which is the same as the Varuṇa, the sky god of the early Āryas. The code of the sky is found in the sound Rṣava, hence Rṣava is the first musical note. This musical note was split into two, the *Udāttā* and the *Anudāttā*. This phase of evolution resembles the second stage of evolution of the Vedic deities, when the solar deity came to be worshipped side by side with the sky. These dual deities were called Indra-Varuṇa, Mithra-Varuṇa etc. in the Vedas. The second sound that represents the solar deity is the Panchama, hence, the Panchama represents the second stage in the evolution of the sound. In the third stage of evolution we get an intermediate sound called the *Sārīta*. The third deity in the evolution of the Vedic deities is the earth, hence the sound that represents the earth is the third note. It is the Śaḍaja that represents the sound of the earth, hence Śaḍaja is the third sound in the process of evolution. Thus we get the sounds *Pū Sā Re* as notes of the Vedic chant. In the Vedic pantheon we have seen that the celestial fire has been split into the fire and the sun ; and the celestial ocean, the sky, has been divided into two, the sky and the water. In music too, we are confronted with the same phenomena. The Panchama, which represents the sun, has been split

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

into two sounds representing the two solar manifestations, the sun and the fire. The Gāndhāra note stands for the fire, hence the Panchama has been divided into the Panchama and the Gāndhāra. The Rṣava which represents the sky has been split into two sounds representing the two manifestations of the sky, the sky and the water. The Madhyama note stands for water, hence the Rṣava has been split into the Rṣava and the Madhyama. In this phase of evolution we get the arrangement of the sounds as Re, Gā, Sā, Mā, Pā. This scale of the notes varies a little according to the Saṅgita Ratnākara and the Saṅgita Makaranda. According to the Saṅgita Makaranda and the Saṅgita Ratnākara we get the following stages of evolution : Ni ; Ni, Re ; Ni, Sā, Re ; Ni Mā Sā Gā Re. The last scale of the notes has also been quoted by Mr. Popley. The third stage Ni Sā Re is also acknowledged by the musicians, some of whom are of opinion that many Ṛks chanted by the Sāmans are composed of these three notes Ni, Sā, Re. So, the calculation with the help of the Tāntric codes is verified by the findings of the musician. In this respect the above theory comes to be a correct one. Moreover, according to the Saṅgita Ratnākara there is another alternative process of the evolution of sounds. In this process we find the sound has been said to evolve in the following order : Dhā ; Re Dhā ; Re Sā Dhā ; Re Gā Sā Mā Dhā. We find, therefore, that there are three processes of the evolution of sounds, (1) Re Gā Sā Mā Pā according to the Ṛkprātiśakha, (2) Ni Mā Sā Gā Re according to the Saṅgita Makaranda and (3) Ni Mā Sā Gā Re and Re Gā Sā Mā Dhā according to the Saṅgita Ratnākara.

The Vedic nature of sounds in the garb of the Vedic deities lay concealed in the Tantras. The Grammarians deviating in particulars from the Vedic division of the sound accepted the third stage in the evolutionary process of the Vedic sound. The musicians while mentioning the early Vedic division of

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

sounds stated that the first four divisions of notes, the Archika, Gāthika, Sāmika, and Svarāntara are lost and they added two new notes to complete the scale or the Saptaka. So we may here conclude that though the early Vedic divisions are lost or rather forgotten among the musicians, it is again they who have preserved the continuity of the Vedic divisions of sounds unconsciously for generations.

From the above process of the division of sounds according to the Tantras it is evident that the Tāntric literature was of a later date than the Vedas. All the theories of the pre-Vedic origin of the Tāntric cult are nullified by this finding. The assumption of Sir John Marshall of the Tāntric origin of rites and deities in the pre-historic cities of the Indus valley, therefore, does not go against our conclusion because we have shown not only that the origin of the Tāntric cult took place in a later period of history, but also the fact that the Tantras were actually based on the early Vedic conception. Thus we have given conclusive proof about the post-vedic origin of the Tāntric cult.

So far we have studied the divisions of sounds. Ideas were expressed as a result of the combination of sounds. People talked and conveyed their ideas to one another by the help of the combination of sounds. With the progress of the society, complexity in the nature of sounds appeared. A need for writing down the ideas was then felt. The early people began to express their ideas very crudely in pictures. In the most developed stage of the Ārya society when the different clans had merged into various communities, the different systems of script arose. A further evolution of the society necessitated a comprehensive system of the script which would include all the existing ones. This last process of evolution is found in the Tantras. The Tantras generalised all the existing scripts and made out a comprehensive

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

system of the script. The systematisation of the script in the Ārya society was recorded in the Tantras. From this record we find that the systematisation of the script was made in accordance with sounds relating to the five Vedic deities. Thus we find the five groups of scripts—the sun, earth, fire, water and sky groups. The alphabets of the sun group are written by the sun or objects relating to the sun, those of the water group by reservoirs of water or objects relating to water, those of the earth group by the earth or objects relating to earth, those of the fire group by fire or objects relating to fire, those of the sky group by objects relating to the sky. Each group comprises eight to nine letters.

Take for instance the sky group. How to write down in script the sky boundless and limitless? The Tantras have given the answer : The sky is, it is true, boundless, but it can be indicated by objects that are related to it. Thus it may be indicated by the sun which rises in the morning and sets in the evening ; by the cloud ; by the lightning ; by stars ; by the moon. It may also be expressed by an ocean, because the sky being the reservoir of water, is the celestial ocean ; by a river, because the sky for the very same reason is the celestial river too. It may be represented by two or three imaginary hills, over which the sun rises, takes rest and sets. These are called the Udayāchal or the mountain of sun-rise, the Astāchal or the mountain of sun-set and the mount Meru, the central mountain in the Purāṇas. The sky again may be represented by three imaginary lines marking the three stages of existence of the sun in the sky or representing these hills. Hā hā, Śan Śan, and the undifferentiated humming sounds like Hm Hm are all that are produced in the sky. So these figures represent Ha, Ha, Śan, Śan and the undifferentiated humming sound. The sounds

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

of the sky group comprise nine variants : Li, Lee, Uma, Eañ, Na, Na, Ma, Sa and Ha.

Li, and Lee (४) comprise one sound. This sound is expressed in writing by a running river ; by three mountains ; by *Alakñananda*, the celestial river ; by *Kamala*, the golden-coloured paddy-goddess born of the Kshirode ocean, the sky ; by a jar representing the Soma-Pâtra which resembles the sky in its being the reservoir of the Soma-juice ; by the right cheek ; by a bird representing the sun as the Syena ; by the head of an elephant representing the sky ; by a thunder-bolt ; by the sun ; by hairs standing on end resembling the rays of the sun spreading on all sides ; by the celestial tank ; by a beautiful garland representing the circle of light round the sun ; by a mother nursing her child representing Aditi with the sun in her lap ; by a face representing the sun and by many other symbols.

The sound Uma (५) is represented by an eye, a symbol for the sun. The sky is called one-eyed, *Ekanetri*, because it has one eye in the sun. It is expressed by the picture of a baby, *Kumar* standing for the young sun ; by a bitch, *Kukkuri*. The dawn in the Vedas is Saramâ the bitch, hence the bitch represents the sky. It is also represented by a Soma-jar, *Kâma-priya* ; by a husband, *Pati*, the sky, who is the male principle of the dual deities Dyâvâ-prthivi ; by a Soma-jar, representing the celestial reservoir of water ; by a dark sheet, indicating the sky without the sun.

The sound Eañ (६) is expressed by an *Ankuśa* which is a goad for the elephant. The elephant is a cloud god, hence the *Ankuśa* that drives the elephant stands for the lightning which cleaves the cloud. It is also indicated by four stars, *Chatusrâta*, representing the four cardinal points of the sky ; by a smiling female figure, *Charuhâsini* symbolising the

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

smile of the dawn ; by plaits of matted hairs depicting the clouds ; by fingers representing the pencil of rays ; by a flag with a fish-symbol, standing for the celestial ocean, with the sun as a fish the name of which is *Makaradvaja*.

The sound N (ऋ) is indicated by three perpendicular lines, *Tri-rekha* representing the three imaginary divisions of the sky ; by two eyes *Dvinetri*. The sky is two-eyed because it has two eyes in the setting and the rising suns. It can also be represented by a belly of a crow, *Kakodari*, the blue sky being similar to the belly of a crow ; by a Pital tree, *Charu*, standing for the imaginary tree of light ; by a Guruchi creeper, *Chinnā* representing the celestial tree in the form of a creeper. The Chinnā resembles the sky-tree as it receives nutrition from the air having no root in the earth. It is also expressed in writing by a double Ra, representing the morning and the evening suns ; by a wife, the symbol for the Soma ; by an arrow representing the pencils of rays of the sun ; by a road indicating the high road of the sky for the journey of the sun ; by a boar, a symbol of the cloud ; by a black bee, the humming of which resembles the sound of the sky.

The sound N (ऋ) is expressed by a river standing for the celestial river of the sky ; by the sun, *Tupana* ; by a boat representing the boat of the sun crossing the Kshirode ocean ; by the setting sun, *Pralayagni* ; by a coloured boat, indicating the colours of the sun ; by flames of the fire representing the rays of the sun ; by a beautiful hand, a symbol for the rays of the sun.

The sound Ma (ऋ) is expressed by a *Vazra* which is a kind of Yupa with branches on it ; by a jar, *Kalaśa*, representing the Soma-Pâtra and consequently the sky ; by *Veka*, *Dardura*, *Manduka*, the three varieties of frogs, representing the undifferentiated humming sound of the

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

sky ; by a palanquin, *doli*, standing for the vehicle of the solar deity in which he passes the road at night ; by a big jar, *Grahapati*, the lord of Grahas or Soma-jars ; by a belly symbolising the night from which appears the sun ; by a butterfly corresponding to the sun in its display of colours.

The sound Ś (श) is represented by a *Chakora*, the sun in its bird form ; by a conchshell, a dweller of the sea symbolising the sun in the heavenly ocean ; by a *Vāruni*, the Soma-pot ; by *Pokeśa*, the sea.

The sound Ha (ह) is represented by a flower-bud, a *Kalikā* ; by *Paśupati*, Paśu being the sun Paśupati means the sky. The sound is indicated by a *Kṛkvara*, wearer of the skin of elephant. The elephant is the cloud, hence the wearer of the skin of the elephant is the sun. It is also expressed by *Pīṇaki*, the possessor of Pīṇaka ; by the Śiva, a solar deity ; by a five-faced deity, representing the sun in its five fold rays spreading on five sides ; by a blue necked one, representing the blue sky ; by *Gangādhara*, the sustainer of Ganga, the rain ; by milky way ; by red colour representing the sun ; the sky becomes red coloured by the advent of the sun, hence the sky is called *Revati* or red-coloured. It is again indicated by a swan, representing the sun ; by a representation of the river, *Barākūr*.

The second sound in the series is represented by the sound of water. The sound of water actually is the sound produced when rain falls in torrents like the jham, jham or kal, kal sound of a running river. This sound may be expressed by the sky ; by a river ; by a reservoir of water ; by objects representing the above sounds ; by a thunder ; by clouds. The figures representing the sounds of the sky and water are inter-changeable as they are inter-related. This sound forms a group with Ri, Ree, Ow, Gha, Jha, Dha, Dheh, Bha, Wa and Sa. Sounds Ri, Ree are expressed by a

THE RIGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

bell, the sound of which represents the sound of rain ; by a cascade producing a sound akin to rain ; by a lamb representing the sound of rain by its lowing ; by a bow representing the sun with the Soma or water.

The sound Ow (ओ) is represented by a sow, which likes to play in water and mire and thus symbolises the sun that resides in the sky, the ocean.

The sound Gha (घ) is represented by a bull, which is a symbol for the sun and as such represents the heavenly ocean ; by a snake, the *Sankhini*, representing the cloud ; by *Kamini* and *Gouri*, the female figures representing the Soma, the feminine aspect of the sun ; by three eyes, indicating the three stages of the sun in the sky.

The sound Jha (ऋ) is represented by the region of *mammae*, the reservoir of milk, which symbolise the celestial ocean, the secretre of rain. The rain nourishes the plants as milk nourishes the baby. The sound is also represented by a goat, the symbol for fire or the sun ; by a big jar ; by bangles representing the sun.

The sound Dha (ऋ) is indicated by a drum, the sound of which is similar to the sound of rain ; by a river ; by a figure, one half of which is male and the other half female, representing the sun with the Soma.

The sound Dhah (ऋ) is expressed by a Turya or horn, the sound of which is similar to the sound of the rain ; by a flower representing the sun ; by a fish.

The sound Bha (ऋ) is represented by water ; by a black bee, the humming sound of which indicates the rain ; by a snake, the cloud deity ; by two eggs representing the rising and the setting sun.

The third sound in the series is represented by a dull thud, similar to what is produced by a footstep or by the striking of the earth by a stick or the bough of a tree. Similar dull sounds are produced by the roaring of some

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

animals. This sound is therefore indicated by the aforesaid objects. This sound forms the group comprising the sounds U, UU, O, Ga, Ja, Da, Dah, Ba, La.

The sounds U, UU (उ, ऊ) are expressed by a straight line representing the earth, called *Ekamâtrâ* in Sanskrit. The earth is *Ekamâtrâ* because it is measured by one, the sun. The sound is also indicated by Devataru or celestial tree that comes out of the womb of the earth ; by two hands representing the two sides of the earth, the east and the west.

The sound O (ओ) is indicated by a dead woman representing the earth during the night ; by three mâtîras or strokes corresponding to the three hills over which the sun rises, takes rest and sets respectively.

The sound Ga (ग) is represented by a cow. The lowing of a cow is like the dull sound produced when the earth is hit by a stick. The sound is also expressed by the figure of a woman representing the mother earth ; by a hill ; by a jar producing a dull sound when it is being filled with water ; by the mouth of a cow; by a woman with vermillion on her forehead representing the earth with the morning sun ; by vermillion representing the rising sun.

The sound Ja (ज) is represented by the bough of a tree; by a running man ; by the string of a bow producing the dull sound ; by a wood ; by a snake symbolising the sun that comes out of the womb of the mother earth ; by long arms.

The sound Da (द) is expressed by a left leg ; by a woman wearing the garland of diamonds who represents the nocturnal earth with the starry sky over it.

The sound Dah (ढ) is represented by the left ankle ; by a hill ; by the snake.

The sound Ba (ब) is represented by a jar ; by a beautiful neck ; by a face ; by the trunk of the body.

The sound La (ळ) is denoted by a rhinoceros, the horn on

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

its snout representing the peak of the mountain ; by a mother with a child ; by the Meru mountain ; by a river.

The fire produces a breaking sound, hence the breaking sound is represented by the fire. ,The fire, like the sun is also a revealer of objects. So it may be represented by the sun or by an eye which reveals external objects. Hence objects producing breaking noise or possessing revealing properties enter in expressing this sound. This sound comprises a group of sounds in E, EE, Ai, Kha, Chha, Tha, Tha, Pha, Ra, and Ksha.

The sounds E, EE (ऐ, ए) are represented by an ocean. The ocean is the birthplace of Agni, so it represents the sound relating to the fire ; by a garland of light ; by the conchshell, *Pāñchajanya* representing the ocean, the birthplace of the fire ; by the left eye, the revealer of the external objects, which symbolises the fire ; by a garland ; by a wheel or Chakra representing the sun ; by the tongue, which being the organ of speech helps in revealing the mental idea and as such is similar to the fire.

The sound Ai (ऐ) is indicated by the sun with rays representing the fire with flames ; by matted hair symbolising the flames of the fire ; by an arrow representing the pencil of the rays of the sun and the flames of the fire ; by the moon.

The sound Kha (ख) is expressed by a sword representing the flame of the fire ; by a holder of the sword ; by a monkey producing the same sound as the sound of fire.

The sound Chha (छ) is indicated by a one-eyed deity representing the sun of the dawn ; by three points representing the three pieces of wood used in the Yaiñā to receive the fire ; by an ear of the cow resembling the flame of the fire ; by a shadow representing the sun ; by a two-headed deity, representing the two phases of the fire in the morning and the evening.

The sound Tha (ठ) is expressed by a circle representing

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

the solar circle ; by the full-moon ; by a lotus which resembles the fire in its birth from the water ; by a rainbow, which, like the sun, throws out the pencils of rays.

The sound Tha (थ) is indicated by a jar representing the sky that holds the sun ; by the hair that represents the rays of the sun as well as the flame of the fire ; by a hillock standing for the abode of the sun ; by Pingala, the sky in the day ; by a chariot representing the chariot of the sun ; by a snake representing the sun.

The sound Pha (फ) is expressed by a fruit representing the sun, the fruit of the sky ; by a crab symbolising the sun in the ocean of the sky ; by a tortoise ; by the confluence of the three rivers indicating the three pieces of wood used to receive the fire.

The sound Ra (ऋ) is indicated by a rider on the goat, the goat being the vehicle of the fire ; by a snake ; by flames ; by seven tongues representing seven flames of the fire.

The sound Kṣa (क्ष) is indicated by the picture of the right hand, representing the rays of the sun, whose rays are its hands ; by a *Tambaru* making the sound which symbolises the sound of the blazing fire ; by a house representing the sacrificial *Mandap* ; by a face representing the sun.

When people express delight at the sight of the rising sun, the sound thus produced represents the sun. The sun may be represented by an ocean from which it rises ; by the earth from whose womb it comes out ; by imaginary lines and hills relating to its existence in the sky ; by a flower or a fruit ; by the eyes ; by the flame of the fire ; by a river or the like. Thus the sound representing the sun also may be indicated with the help of the aforesaid objects. This group of sounds comprises A, A, Aye, Ka, Cha, Ta, Tha, Pa, Ya, Sa.

The sounds A, Ā (ए एा) are represented by the sun itself; by one *Matra*. *Matra* is measurer and the sun measures the

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

days, hence the sun is called one *matrā*, the only measurer ; by a face ; by a lamb ; by a river that comes out of a mountain ; by a tank representing the celestial lake ; by a blind woman representing the earth which is blind without the sun ; by the head.

The sound Aye (ऐ) is indicated by a man with two upraised hands ; by the wheel of a potter representing the sun ; by a blue lotus, that represents the midday sun ; by a boat, the vehicle of the sun.

The sound Ka (क) is expressed by a man holding a *Chakra* or wheel ; by a bow ; by the setting sun ; by Padmapâni, one holding a lotus flower in his hands ; by *Skanda*, the trunk of a man.

The sound Cha (च) is expressed by an arrow, representing the pencil of light ; by an eye ; by *Pingala* ; by a dancing figure ; by a tortoise representing the sun.

The sound Ta (त) is indicated by half-moon ; by the morning sun ; by the crown.

The sound Ta (त्र) is represented by *Aśva*, which is Visarga, the symbol of the morning and the evening sun ; by double suns ; by a horned animal, the horn representing the pencil of light ; by an ear ; by three locks of matted hair.

The sound Pa (प) is indicated by an archer representing the heavenly archer, the sun, who throws arrows of light-pencils ; by the eye of Indra ; by a fish ; by the fruit of the lotus flower ; by a leaf ; by a betel leaf.

The sound Ya (य) is represented by a fish ; by a black bee.

The sound Sha (श) is expressed by a bull ; by a lightning.

From the above enumeration of the sounds we come to the conclusion that one sound has many variants. These variants of each sound are but the remnants of the various pronunciations of a sound existing in the Ārya societies. The clans of the Ārya people were not in one place, they were separated by natural barriers. This

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

separation caused the difference in the pronunciation of the same sound. It is also seen in the modern times that the people of the same race and nationality living in different places pronounce the same sound differently. In Bengal we find that the sound Ra (ର) is pronounced in some places as A (ା) and in some places as La (ଳ). In some places again Na (ନ) is pronounced as La (ଳ), and Ha (ହ) as A (ା). So the variants of each sound are thus accounted for when we understand that one and the same sound was pronounced differently in different clans of the Āryas. The ancient literatures of the Ārya people recorded at least three sets of variation in the script. The three main Ārya clans are Deva, Manuṣya and Rākṣasa and they have their groups of sounds quite separate from one another. Thus :

The group of the alphabets of the Deva is :

महसू Sun	अग्नि Fire	पृथिवी Earth	जल Soma	आकाश Sky
अ आ	...	ओ	औ	...
ए	...	...	...	...
ऋ	...	ऋ	ऋ	ऋ
ऋ	ऋ	ऋ	...	ऋ
...	ऋ	ऋ	...	...

The group of the alphabets of the Manuṣya is :

महसू Sun	अग्नि Fire	पृथिवी Earth	जल Soma	आकाश Sky
...	इ	उ	ऊ ऊ	ਊ ਊ
ऋ	ऐ	ऐ	ऐ	...
ऋ	ଓ	ঔ	ও (W)	ও
ঔ	...	ঔ	ও	ও

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

The group of the alphabets of the Râksasa is :

महत् Sun	अग्नि Fire	मूर्धनी Earth	जात्रा Soma	आकाश Sky
...	ऐ	उ ऊ	...	...
...	ऋ	ग	ऋ	ऋ
ऋ	ठ	...	ठ	ठ
प	फ	...	ष	ष
व	र	ब	...	...

From the charts given above a very curious thing is observed. While the Devas have alphabets of the sun group as the largest, the Manûsyas have the alphabets of the water or the Soma group and the Râksasas have the alphabets of the fire group as the largest. From this it may be inferred that the Devas were the worshippers of the sun, the Manûsyas the worshippers of the Soma and the Râksasas the worshippers of the Fire. The Tantras including all the variants of each sound show the beginning of a synthetic age. All the variants current in the society were collected and arranged and standardised. Henceforth no new variation had the chance to enter the standardised list of the sounds. The language created with these alphabets was called *Sanskrit*, because all the prevailing dialects were reformed to create this language.

The synthetic process that began by merging clan-dialects into group or community dialects ended by creating a comprehensive language in which all the communities merged their different dialects. This phenomenon of the inclusion of all the dialects in a comprehensive system, being a part of a greater comprehension going on in the society, brought about a synthetic move regarding the deities of Deva, Manûsha and Rakshasa. The community gods, the Marut, the Soma and the Agni merged themselves into one

THE SOVEDIC CULTURE OF THE PRE-HISTORIC INDUS

supreme deity. This supreme deity is sometimes designated as the sun (Marut), sometimes as the Agni and sometimes as the Soma. This process of synthesis left its mark in the literatures of the people and in the expressions : व्योति सोमः (fire is the Soma) and यो वै विष्णु सोमः सः (he that is Viṣṇu is the Soma), about the Soma, अपिर्वा अक्षः (the fire is the sun) and यो वै वरुण सोऽपि:। (He that is Varuṇa is Agni), about the Agni, अपिरेव सविता (The fire is the Sun), वरुणः एव सविता: (Varuṇa is the Savita), about the sun, we notice the faint trails of the process of synthesis that went on in the time of the Tantra. This view is further supported by the compound words : इद्रसोमाभ्यः। अपिसोमाभ्यः। इद्राप्यः। निशावहणः। The Astrology also records this synthetic move in its language. It has divided the human beings into three groups, Deva, Nara and Rakṣasa. Each man, is according to Astrology a member of one or the other of the three communities. The name of a community or a group is गच्छ। Thus a man is either of the Deva group (देवगच्छ), of the Nara group (नरगच्छ) or of the Rakṣasa group (राक्षसगच्छ)। The wonderful conservativeness of the Ārya society thus has conserved all the details of the great synthesis.

These reformers made charts and dictionaries for the easy understanding of the language. But in course of time people forgot all about the charts and dictionaries of script-building, because the alphabets at that time became natural with them and need of explanation of the script was not felt. But the charts remained there in the Tantras. With the oblivion of the main clue, the charts were explained in new and fantastic ways. Thus the chart of the script-building was used as a guide to find out the first letter of the mystic word, passed on a disciple. The method is novel and interesting. We know the elements are considered to have enmity and friendliness with one another, e.g., the water is the enemy of the fire, the Vāyu again is the friend of the fire.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

The first letter of the disciple's name is taken and a letter from its friendly group is picked up. The spiritual preceptor then finds out the name appropriate to the disciple with the help of this letter.

CHAPTER III

THE TANTRAS (THE SCRIPT)

THE RELATION OF THE EGYPTIAN, CHINESE, JAIPUR, INDUS AND ALL SCRIPTS TO THE TANTRIC SCRIPT

The second chapter of the book brings us face to face with a record of synthesis of the diverse scripts of the many Ārya clans. The Tantras recorded the history of this comprehension of the script. We are struck with wonder at the precision of the science of the script-making, preserved through so many long ages, withstanding the ravages of time and onslaughts of barbarous foreign people who strove to destroy everything that fell in their way with sword and fire. These so-called mysterious scripts had been handed down from generation to generation and the descendants of the Āryas preserved them unaware of the great value of the precise culture of their forefathers. The clues to decipher the script, as we have seen, are all forgotten and the significance of the codes is lost. The science of script-making thus lay buried in the mass of the Tantric literature for ages. As luck would have it, the real significance has now come to light and we have come across a system of scripts with no less than 4500 characters which are actually pictures of objects each representing a particular sound. As we wade through this mass of picture-alphabets our attention is arrested by a rather unique discovery that pictures of several different objects have been used for the same sound. At first upon a cursory glance it seems rather strange to get so many characters to represent a single sound. A more thoughtful examination of and a deeper insight in the science of scripts

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

reveal that these different types of characters were used by different Ārya clans each of whom had its own system of scripts. For example, if one clan represented the sounds by human figures in different poses, another represented the same sounds by different human limbs, while others again would take the help of spear-heads, mountains, rivers, birds and all varieties of animate and inanimate objects to represent the same sound.

All these different systems of scripts were gathered together and recorded in the Tantras, which may be said to depict the age of synthesis of the scripts of the Ārya clans. The Tantras did not invent the scripts, they were only the records of the systems that had already been in vogue in the Ārya society. They systematised all of them under a common basis. This systematisation of the scripts was a part of a greater synthesis that was going on in society, religion and language. All the clans that merged their individualities in the all-embracing society during this period of synthesis claimed some recognition of their own scripts. This could only be done by recognising several variants of the same sound. The Sanskrit language with its scripts ranging from eight to nine alphabets for each original sound is a noteworthy record of this great unification.

This comprehensive combination of all the types of the scripts was probably necessitated by a political fusion which required a common medium of speech. All the current dialects were thus amalgamated into one whole and the medium of speech was a resultant new language, which although had some resemblance to each current dialect yet had a quite independent existence. This medium of speech came to be known as the Sanskrit or the reformed language.

Thus was evolved the modern Sanskrit language by

THE BGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

remodelling all the different dialects then in use. As in the days of yore, different dialects are still to be found in different parts of India. The dialect of one province is unintelligible to the people of a neighbouring province using a different dialect. Even in the same province and among the people of same nationality the dialects vary from district to district and community to community. Consequently the same sound varies in different provinces, districts and communities. This variation of the sound further proves that when the variants were thus systematised and the Sanskrit language created, a greater India and a greater and nobler Ārya nation were in the making.

In the last chapter we have seen that the mother of the Sanskrit *alphabets*, the Tantric systems of alphabets were simple pictures of different objects. In this respect it is not the solitary instance of the pictographic writing, as there are not less than four pictographic scripts hitherto discovered. We have now discovered a fifth group of the pictographic alphabets in the picture writings of Jaipur. Therefore the pictographic groups comprise : Jaipurean, Egyptian, Cuniform (Old Persian, Median and Assyrian), Indus and Chinese scripts.

We have seen in the last chapter that the Tantric scripts are the exact representations of animate and inanimate objects. Similar pictures of objects have been recently brought to light during an Archaeological excavation at Rairh situated on the Dhil Nadi in the Jaipur State. The excavation was started by late Rai Bahadur Dayārām Sāhāni, M.A., C.I.E. and completed by Dr. K. N. Puri, B.Sc., D.Lit. (Paris) in 1940 A.D. This site was visited by Carlyle in the year 1871. He picked up nearly 6000 coins including those of Malavas. The aforesaid pictograms discovered during the excavation, are inscribed on the punch-marked copper coins of which nearly 3075 pieces

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

have been discovered.¹ These pictograms can be divided into ninety-two heads. The most striking aspect of the Jaipur script is their close resemblance with Tāntric scripts—their readiness to respond to the Tāntric codes. It is evident that the Jaipur script is the only available representation of Tāntric codes. While the description of the form of an alphabet representing a specific sound is in the Tantras, the representation of the form is in the Jaipur pictograms. Tantra and Jaipurean script thus complements one another. For instance while the Tantras enumerate that the sound Na (ந) should be represented in script by a river, we find the actual picture of a river in the Jaipur script to represent the same sound, while it is enumerated that the sound S (ஸ) is to be represented by an elephant or by a bull, the Jaipur script represents the actual form of an elephant or of a bull to represent the same sound. So, we may conclude by assuming that the Jaipurean pictograms are the Tāntric scripts in form.

The Egyptian hieroglyphics form a great group of the pictographic alphabets. Sir Wallis Budge records the total number of 1428 hieroglyphic characters, dividing them in twenty-eight heads, while the list published by Messrs Harrison and Sons mention the number to be 2863. The Egyptologists claim that they are able to decipher the Egyptian hieroglyphics with the help of the inscriptions on the bilingual tablet, the Rosetta-stone. The theory which claims the inscriptions on bilingual tablets as a factor in ascertaining the sound value of any given alphabet with unknown sound value, has been proved imperfect, because the sound value of the majority of the hieroglyphics could not be ascertained. Prof. Langdon also did not rely upon the bilingual-tablet theory as a factor to infer the correct sound

(1) Excavation at Reih, p. 1-2.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

value of a given alphabet with unkown sound value. So, to infer the correct sound value of Egyptian hieroglyphics we must look elsewhere. As a pictogram the Egyptian hieroglyphics are similar to the Jaipurean picture-words. We may try to apply the same science of script of the Tantras to Egyptian hieroglyphics which we have applied to the Jaipurean pictograms. By application of the Tantric science of alphabets to the Egyptian pictograms we find that the Egyptian pictograms can be explained by the Tantric science of alphabets. For instance we find a symbolic figure of the river has been recognised as the alphabet standing for the sound Na (ନ) The Tantra mentions that the sound Na (ନ) should be expressed in writing by a river. In this case the Tantric and Egyptologists decipherment tallied. In the case of the picture of two and three rivers the Egyptologist's effort to decipher them has been a failure because the same sound 'N' (ନ) has been inserted for these pictures also, but according to the Tantric codes this two pictures stand for two separate alphabets Da (ଦ) and A (ଅ). There are other instances also where the Egyptologists could not ascertain the correct sound value of the hjeroglyphic and had inserted the name of the object represented by the picture. For instance we find a picture of an eye on a pedestal which has been deciphered as Asur. Here the picture is of Asur, it is true, but the picture is not the alphabet, the Asur represents an alphabet. It is the Tantras that can say what alphabet is indicated by the picture of Asur. It is the alphabet Ma (ମ) that has been represented by the picture of Asura say Tantras. Now, we find that the two pictographic systems of alphabets can be deciphered with the help of the Tantric codes, in this respect both of them seem to have a common origin. Though originated from a common source the Jaipurean and Egyptian hieroglyphics are ~~not~~ quite similar. They exhibit a marked difference,

THE BOVEDIC CULTURE OF THE PRE-HISTORIC INDUS

so much so, that the identity of the two cannot be easily established. While the Jaipurean script represent the sound *Na* (ந) by the actual picture of a river, the Egyptian hieroglyphics represent the same sound by an undulated line, the symbolic figure of a river. This phenomenon indicates that the two scripts are not contemporary, one is earlier than the other. While the Jaipurean script represented the early Tantric pictograms and did not evolve, the early Egyptian script show a much evolved stage of pictographic symbols. The evidence of the script therefore leads us to assume that the civilization of the Egypt was post-Tantric in origin. The conclusion thus arrived at paved the way to further inference that the early Egyptian civilization was not only influenced by the Indian or Ārya culture but it was actually the Vedic people that built the early Egyptian civilization. The early Egyptian god *Ta* is the sun and *Nu* the sky according to the Tantric codes, these two were the gods of the Ārya people. The god *Osiris* is the Vedic *Asura* and *Isis* the Vedic *Uṣā* and the mythology connected with them are quite Indian in character.

The excavation at Mohenjo-daro in the Indus valley has revealed a number of seals with pictograms engraved on them. The pictograms comprised of 363 characters. They resemble the Jaipurean and the Egyptian picture-letters. The resemblance of the Indus with the Egyptian pictograms is noticed by Prof. Langdon who observes : 'The Indus inscriptions resemble the Egyptian hieroglyphics more than they do Sumerian linear and Cuneiform systems'. This similarity is accounted for when we find that the Indus script also can be deciphered with the help of the Tantric codes. For instance, the sound *Ka* has been represented by the trunk of a human body in the Tantras, a similar figure of human trunk is also found

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

in the Indus script to represent the sound *Ka*. Though alike, the Indus script is in a state of further development than the Egyptian or the Jaipurean scripts. The Indus script was awaiting, as it were, to develope itself into alphabetic form. This phenomenon also has been noticed by Prof. Langdon who remarks : 'In this study of the early seals of the Indus valley, I have definitely stated that the early Indian alphabets, known as the Brâhmi script is derived from the ancient Indus pictographic writings and I have identified many Brâhmi characters with confidence.' A doubt may arise in our minds that if the Indus script be similar to the Egyptian and is much developed, so much so, that it is awaiting its transformation to alphabetic character, then why not say that the Indus script originated in the Egypt. The answer to this is that the science of script lies with the descendants of the Aryas and all the pictographic scripts can be deciphered with the help of that science. It is quite natural to assume that the possessors are surely the inventors of the science. Moreover, the fact that the Egyptian script did not evolve to the alphabetic form, show clearly that the Egyptian people did not know the science of script-building. For this reason the Egyptian script did not evolve to the alphabetic form. The scripts have been evolved in the land of their birth to the alphabetic form, and the colonisers in Egypt due to the loss of their connection with their ancestral home forgot the science of script. Prof. Langdon also suggested that it was the Sanskrit literature that possessed the clue to decipher the Indus scripts. He gave expression to his views in the following words : 'Although vowels must be inherent in all signs, nevertheless some of the signs and accents must be pure vowel signs. For this reason alone it is necessary to resign further investigation to Sanskrit

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

scholars. If future discoveries make it possible to transliterate the signs and the language prove to be agglutinative, it will be then a problem of Sumerologists. I am convinced that all attempts to derive the Brâhmi alphabets from Semitic alphabets were complete failure¹ ! Prof. Langdon's presumption has been found to be true, because the Indus script deciphered with the help of the Tantric code has revealed that the Indus language is Sanskrit.

The Chinese letters are also pictographic in character. In this group very few letters have retained their independent existence or their original form. The number of simple alphabets will not exceed twenty. The scanty number of alphabets is due to the formation of the permanent compound words, by the permutation and combination of the original alphabets. Thus from the formation of the permanent compounds the Chinese alphabets have lost their individualities. It is rather difficult now to fish out the original Chinese alphabets from the colossal number of 41,940 compound words, to cite the maximum number of compound Chinese characters available.² As a pictogram, it is similar to the Jaipurean, Egyptian and Indus scripts. Egyptologists like Joseph De Guigens, who was also a Sinologist and who compiled an Anglo-Chinese dictionary tried to prove that the epigraphic characters of the Egyptian were to be found in the Chinese script and the Chinese nation was nothing but an Egyptian colony. Following in his footsteps M. le Comte de Palin (or Pahlin) held that the Chinese and the Egyptian characters were identical in their origin and meaning. This

(2) 'The characters in Morrisons dictionary are arranged under 411 syllables (not distinguishing between aspirated and unspirited sounds) and their total numbers including hundreds of duplicates are 512, 674 ; In De. Guigens dictionary there are 13,933 of which 1040 are duplicated forms, in the Canton dictionary there are 7850 ; In the Fuchar's dictionary, 9390 and in Goncalves 7670 words.'—Syllable Dictionary of Chinese.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

move was on foot in the latter half of the eighteenth century. Later, in the beginning of the present century another similar move was about to be started. Mr. Birch tried to decipher the Egyptian script with the help of the Chinese characters. Referring to Birch's theory about the origin of the Egyptian language, Sir Wallis Budge remarks that the Birch's arrangement of the hieroglyphics may be termed ideo-phonetic, as it embraces both principles of ideal and phonetic classification. He is further inclined to assume that Mr. Birch has borrowed the arrangement from the Chinese language which is cognate in its construction with the Egyptian hieroglyphics. Thus we find a relation between the two well known picture-writings, the Egyptian and Chinese has been suggested by Egyptologists. What more, the Chinese script, like the Jaipurean, Egyptian and Indus script can also be deciphered with the help of the Tantric codes. For instance, the sound Ja (جا) has been indicated by a branch of a tree in the Chinese pictogram, the Tantra also mentions that the sound Ja (جا) should be indicated by a branch of a tree ; the sound Ma (ما) has been represented in the Chinese script by the figure of a tree, the Tantra also mentions that the sound Ma (ما) should be represented by a Vazra, which is the picture of a tree representing the Vazra-Yupa.

Here we find that the Chinese picture-words also come under the same system of the Tantric script. As to its place in the chain of the evolutionary process of the Tantric script, the Chinese picture-words comes next to the Indus scripts. Indus scripts represent a particular sound by a complete figure, say of a fish, the Chinese picture-words represent the same sound by a symbolic figure of the fish, which is but the lower extremity of the fish indicating the further evolution of the sign.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

Perhaps it will not be out of place to record that in K'anghi's dictionary there are thirty-six compound words which appear to be nothing but the transliteration of the Sanskrit alphabets. It was perhaps the effort on the part of the Chinese emperor to link the Sanskrit to the Chinese alphabets during the Buddhistic regime.

Unlike the above mentioned forms of pictograms there is another system of picture-writing which bears no apparent relation to any of the above mentioned ones. It is called the Cuniform system and is made of alphabets formed by the various arrangements of the cones or arrow-heads and comprises, the old Persian, Median and Assyrian alphabets. The Persian alphabets number 38, the Median, 56 and Assyrian 80. This system of script, independent as it appears of all the prevailing scripts of the world, can also be deciphered with the help of the Tantric codes. For instance, we find that the sounds i and q have been expressed in the Median Cuniform as figures formed by five arrow-heads in two different arrangements. The Tantras also record that the sounds E and Ka should be expressed in writing by five arrow-heads. Here we find that the Tantras and the Cuniform scripts complement one another. While the Tantras mention that the sounds should be expressed by five arrow-heads, the Cuniform script show that, though the number of arrow-heads are equal in the both sounds, it is the difference in the arrangement that differentiate one sound from the other. Thus we find the relationship between the Cuniform system and the Tantric script is established. The Cuniform system of script is conspicuous by its purity and integrity of characters. It is the only single complete and pure system of script. It is not mixed with any other system. While the other systems of alphabets are admixture of different systems of alphabets, the

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

Cuneiform or arrow-head system remains the only independent, system which is made of arrow-heads in different arrangements.

From the above discussions it is evident that the Tantras are the common source of all the various systems of pictographic alphabets of the world. We shall show with the help of ten mediaeval scripts in charts that all of them also originated from Tantras,

The simple Chinese alphabets have lost their identity. The pictograms of Jaipur and Indus have lost their sound values. The Chinese and Cuiniform scripts have retained and preserved the sound value of their alphabets while the Egyptian hieroglyphics retained partially their sound value. The Tantric code can supply the sound value of all the pictograms, it is true, but unfortunately most of the terms of the Tantric codes are not intelligible. Since the date of the use of the codes the social structure has much changed, the Vedic literatures are little studied and the early significance of the words of the Tantric codes is nearly lost. It is a very difficult task for us to decipher the pictographic scripts directly with the help of the Tantric clues. The Chinese, the Cuiniform pictograms and hieroglyphics with their retained sound value will help us in deciphering the Tantric codes by their corroborative proof. So, a combined and comparative study of Tantric codes with the help of the Chinese, Cuiniform and Egyptian pictographic sound values may in all probability solve the knotty problem of the sound values of all the picture-words of all the different languages. To tackle this problem successfully we need a scholar with profound erudition ; he is required to have a fair knowledge of the Sanskrit language, the Vedic and Brâhmañical literatures. He should be well informed of the rituals and sacrifices of the Vedas, Tantras and Purânas and should be well acquainted with the mythology of all the races;

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

and what is more his knowledge should extend to the details of early civilizations as he can hardly afford to be ignorant of the Egyptology, Sumerology and the Sinology. But rarely a single individual can attain to such intellectual depth and extensiveness. It is only practicable to decipher the ancient scripts hitherto unintelligible by the combined effort of a group of scholars with deep and extensive knowledge of the different branches of knowledge stated previously.

In the following pages we shall try to apply our theory of script-making upon fifteen ancient languages and see whether all the scripts can be explained by our theory, the universal theory of the script-making. Over and above the pictographic alphabets of the Tantra, Egypt, Jaipur, Indus Valley and China we shall examine the alphabets of the Brâhmi, Khorôstri, Sabean, Greek, Latin, Ethiopic, Hebrew, Glagolothic, and Moabite stone³ in the following pages.

Following the division of the sounds according to the Tantra we shall divide all the alphabets into five groups. The representation of alphabets of fifteen languages will be made in five charts. The first chart to begin with is the chart of the alphabets of the sky group. (vide chart I)

THE SKY GROUP

Chart I

TANTRIC :

The sound Li (☲) is represented by the picture of three hills, the sound Na (☱) by three vertical parallel straight lines,

(3) An inscription of Mesha King of Moab dating from 9th century B.C. with an inscription to Baal discovered in Cyprus.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

the sound Na (ନ) by a river and the sound Ma (ମ) is expressed by the figure of a Vazra-yupa.

JAIPUR (RAIRH) :

The sound Li (ଲ) is represented by three hills, Na (ନ) by three vertical parallel straight lines, Na (ନ) by a river, Ma (ମ) by a tree representing the Vajra-Yupa, and Sa (ସ) by the picture of an elephant.

EGYPTIAN :

The sound Li (ଲ) is expressed by three hills, Na (ନ) by three vertical straight lines, Na (ନ) by a river, Ma (ମ) by the picture of Ausur and Ha (ହ) by a closed space with an opening below resembling an eye.

THE INDUS :

The sound Li (ଲ) is indicated by three hills, Na (ନ) by three vertical parallel straight lines, Na (ନ) by a river, Ma (ମ) by the figure of the Vazra-Yupa and Ha (ହ) by a figure representing two banks of a river with the sheet of water in the middle.

CHINESE :

The sound Li (ଲ) is expressed by a figure representing three hills, Uma (ଉ) by a figure representing an eye, N (ନ) with the figure of a river showing a bank with hills and the sheet of water, Ma (ମ) is indicated by a tree representing the Vazra-Yupa of the Vedas,) Sa (ସ) is represented by the diagram of three hills connected with the morning, noon and evening sun, Ha (ହ) is represented by the diagram of a river representing a bank, and the sheet of water.

BRAHMI :

The sound Na (ନ) is expressed by the figure of a perpendicular on a straight line representing a mountain on the plain of earth, Na (ନ) is indicated by the figure represent-

THE ḪVVEDIC CULTURE OF THE PRE-HISTORIC INDUS

ing a hill on the plain earth, Ma (म) by a pitcher representing the *Soma-pārta* and consequently the sky, Śa (श) by an eye, and Ha (ह) by the figure representing the three peaks of the mountain by three vertical lines.

KHAROṢTRI :

The sound Na (न) is expressed by an eye, Ma (म) by the figure representing a river, Śa (श) is also represented by a similar figure of a river, and Ha (ह) is represented by the peak of a mountain representing the Udayāchal where the sun rises.

ETHIOPICTIC :

The sound Na (न) is indicated by the figure representing a river with its one bend, Ma (म) by the figure representing two peaks of a hill in an upside down position, Śa (श) by one or two peaks of a mountain, and Ha (ह) by the figure representing a river or by the figure of the trunk of a man representing the sun in the sky.

HIMYARITIC :

The sound Na (न) is expressed with a figure similar to the figure with which the Chinese indicate the sound न (ந), in writing, Ma (ம) by two peaks of a mountain, Śa (ஶ) by either two peaks of a mountain or by one peak of a mountain with the emblem of the sun on it, and Ha (ஹ) by the figure of a trident representing the three places of the sun's existence in the sky as well as by a figure representing the celestial reservoir of water from which a river is coming out.

MOABITE STONE :

The sound Na (ந) is represented by the figure of a river, Ma (ம) by a river, Śa (ஶ) by an eye, and Ha (ஹ) by a door indicating the doorway of the eastern horizon where the sun peeps from behind the door of the night.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

PHOENICIAN :

The sound Na (ନ) is indicated by the figure of a river, Ma (ମ) by a figure of a river and Ha (ହ) by a figure representing the two peaks of a mountain.

GREEK :

The sound Na (ନ) is expressed by a river, Ma (ମ) by a river too, and Ha (ହ) by two peaks of a mountain.

LATIN :

The sound Na (ନ) is represented by a river, Ma (ମ) by a river as well and Ha (ହ) is expressed by a figure representing two peaks of a mountain.

LAGOLITHIC :

The sound Na (ନ) is indicated by the figure of an eye, Ma (ମ) by the figure of the sky showing the four positions of the sun in the day, and Ha (ହ) by a figure of two eyes.

HEBREW :

The sound Na (ନ) is represented by the figure of the sky, Ma (ମ) by a closed figure representing the sky, Sa (ସ) by the figure of three peaks of a hill, and Ha (ହ) by a figure representing the firmament encasing the earth.

THE WATER GROUP

Chart II

TĀNTRIC :

The sound Gha (ଘ) is represented by three eyes, Jha (ଝ) by an archer representing the sun who throws the arrows of light, Dha (ଡ) by a drum, Dhah (ଧ) by a fish, Bha (ଭ) by the figure of a man carrying loads hanging on his two sides from his shoulders.

JAIPUR (RAIRH) :

The sound R (ର) is represented by *Tripada*, a figure with

·MA GROUP

Chart II

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

three feet, Ow (ओ) by *Trisuli*, one that holds three tridents, Dha (ध) by a drum, and Dhah (ध) by a fish.

EGYPTIAN :

The sound Ow (ओ) is expressed in script by the figure of *Trisula* or three tridents.

INDUS :

Jha (ऋ) is represented by the figure of an archer, Dhah (ध) by a fish and Bha (भ) by a carrier of burden.

CHINESE :

The sound Sa (ऋ) is indicated by a figure representing three rivers.

BRĀHMI :

Jha (ऋ) is represented by the figure of the sky, and Sa (ऋ) by a peak of a mountain from which a river is coming out.

KHOROŠTRI :

Jha (ऋ) is represented by the figure of a river bifurcating in its one end.

ETHIOPIČ :

Sa (ऋ) is indicated by the two bends of a river.

HIMYARITIC :

The sound Jha (ऋ) is expressed in by a trunk of a man representing the sun, the giver of rain and Sa (ऋ) by the figure representing two banks of a river.

MOABITE STONE :

Jha (ऋ) is indicated by the figure representing a river, and Sa (ऋ) by a river.

PHOENICIAN :

Jha (ऋ) is represened by a river, and Sa (ऋ) by a river too.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

GREEK :

Jha (ऋ) is indicated by the river of the sky representing the three places of stoppage of the sun in the celestial river of the sky in his heavenly bark, and Sa (ऋ) by two peaks of a mountain.

LATIN :

Sa (ऋ) is represented by the figure of a river.

GLAGOLITHIC :

The sound Jha (ऋ) is represented by a triangle with a circle on its upside turned base. The triangle is the peak of a mountain and the circle is the sun. The sound Sa (ऋ) is indicated by a Jar with its mouth below.

HEBREW :

The sound Jha (ऋ) is represented by a river, Wa (ו) by the sky, and Sa (שׁ) by the figure of a reservoir of water.

THE EARTH GROUP

Chart III

TĀNTRIC :

The sound U (ਊ) is represented by the figure of hairs standing on ends Ga (ଗ) by two feet, Ja (ଜ) by a bough, Da (ଦ) by the figure of two rivers, and Ba (ବ) by the breast of a man.

JAIPUR (RAIRH) :

The sound U (ਊ) is indicated by Shatchakra, Ja (ଜ) by a bough and La (ଲ) by six peaks of a mountain.

EGYPT :

The sound U (ਊ) is expressed in writing by a young bird, Ja (ଜ) by a bough, Da (ଦ) by the figure of double river, Ba (ବ) by a foot.

THE R̄GVEDIC CULTURE OF THE PRE-HISTORIC INDUS
INDUS :

The sound U (उ) is represented by the figure of hair standing on ends, Ga (ग) by two feet, Ja (ज) by a bough, Da (द) by a double river, Ba (ब) by the figure of the human trunk.

CHINESE :

Ja (جا) is represented by the bough of a tree.

BRAHMI :

O (ओ) is indicated by a semicircle representing a hill with the curve on the right, Da (द) by the same figure with the curve on the left, Ba (ब) by the representation of the trunk of a man's body, La (ल) by the picture of a snake.

KHOROSTRI :

O (ओ) is expressed in writing by a cross representing a human figure with one foot, Da (द) by the figure representing a man with his trunk and a foot, Ba (ब) by the same figure with the modification of the curve, La (ल) by the figure of the trunk or by the figure of a bough.

ETHIOPIC :

The sound O (ओ) is indicated by a triangle representing a mountain, Da (द) by an eye, Ba (ब) by a case representing the sky that encases the earth, La (ल) by two feet.

HIMYRIATIC :

O (ओ) is expressed in writing by a circle representing an eye or by a figure resembling the Ethiopic figure representing the sound Ba and Da (द) by an eye or by a door. Ba (ब) is similar to the Ethiopic alphabet. La (ल) is represented by the bend of a knee.

MOABITE STONE :

O (ओ) is indicated by an incomplete circle, representing

EARTH GROUP

Chart III

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

the picture of an eye, Da (ঢ) by a peak of a mountain, Ba (ব) by an eye, and La (ল) by a foot.

PHOENICIAN :

The sound O (ঔ) is represented in writing by two eyes, Da (ঢ) by a peak of a mountain, Ba (ব) by an eye, and La (ল) by a foot.

THE GREEK :

The sound O (ঔ) is indicated by an eye, Da (ঢ) by a peak of a mountain, Ba (ব) by an eye, and La (ল) by a foot.

THE LATIN :

The sound O (ঔ) is expressed in writing by an eye, Da (ঢ) by a peak of a mountain, Ba (ব) by two peaks of a mountain and La (ল) by a foot.

LAGOLITHIC :

The sound O (ঔ) is represented by the earth with two eyes in the setting and rising suns, Ba (ব) by the figure of an upside-turned jar representing the earth with its two eyes in the sun, Ba (ব) by the figure of a bough, and La (ল) by a similar figure as of the Da with a band joining the two eyes.

HEBREW :

The sound Ga (গ) is indicated by the earth with two mountains with the sun on them, Da (ঢ) by a foot, Ba (ব) by the earth with two peaks of a mountain, La (ল) by the figure of a dancing human figure.

THE FIRE GROUP

Chart IV

TĀNTRIC :

The sound E (ই) is indicated by four vertical parallel straight lines, Ai (ই) by the figure *Triputra* representing three cities, Kha (খ) by two parallel vertical straight

ENI GROUP

Chart IV

THE RIGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

lines, Tha (ঃ) by an oblong figure, Tha (ঁ) by a man with a club, Pha (ঁ) by a crab and Ra (ঁ) by the figure of seven tongues standing for the seven flames of the fire.

JAIPUR (RAIRAH) :

The sound E (ঁ) is represented by the figure of a seedling, Chah (ঁ) by the figure of an umbrella, Tha (ঁ) by a man with a club.

EGYPTIAN :

The sound E (ঁ) is indicated by a feather. Its sound value according to the Tantric code should be Ai (ঁ). Ai and E are the sounds of the same group and there is a great possibility of error being crept in the decipherment, hence the decipherment of the Egyptian letter's sound value is perhaps faulty. The sound Pha (ঁ) is represented by a snail, and Ra (ঁ) by a mouth.

INDUS :

The sound E (ঁ) is represented by four vertical parallel straight lines, Ai (ঁ) by *Tripura*, Kha (ঁ) by two vertical parallel straight lines, Chha (ঁ) by three points, Tha (ঁ) by a man with a club, Pha (ঁ) by a crab and Ra (ঁ) by seven tongues.

THE CHINESE :

The sound E (ঁ) is indicated by a horizontal line, Pha (ঁ) by a figure of a running man, and Ra (ঁ) by two horizontal parallel straight lines.

BRAHMI :

The sound E (ঁ) is represented by an eye, Pha (ঁ) by the fire with flame, and Ra (ঁ) by the smoke of the fire.

KHAROSTRI :

The sound E (ঁ) is expressed in writing by the figure of an eye, Pha (ঁ) by an eye, and Ra (ঁ) by an eye.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

ETHIOPIAN :

The sound E (ए) is represented by the picture of a bifurcated smoke, Pha (फ) by triangular and circular fire places, and Ra (र) by a flame.

HIMYRIATIC :

The sound E (ए) is expressed in writing by a bifurcated smoke, Pha (फ) by a circular fire-place and Ra (र) by an eye.

MOABITE STONE :

The sound E (ए) is represented by a vertical line with three transverse projections on the left representing the mother earth, by the vertical line and three mountains of the sun's rest and by the three transverse lines. The sound Pha (फ) is indicated by a Yupa with the sun on it, and Ra (र) by an eye.

PHOENICIANS :

The sound Pha (फ) and Ra (र) are indicated by an eye.

GREEK :

The sound E (ए) is represented as in the Moabite stone, Ra (र) by an eye.

LATIN :

The sound E (ए) and Ra (र) are expressed in writing as in Greek.

GLAGOLITHIC :

The sound E (ए) is represented like Greek, Pha (फ) by two eyes, and Ra (र) by one eye.

HEBREW :

The sound Chha (छ) is indicated by the earth with two hills, and Ra (र) by an eye.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

THE SOLAR GROUP

Chart V

TANTRIC :

The sound Awa (॥) is indicated by a net, A (ए) by a figure of a man with two upraised hands, Ka (क) by a figure of a man without the head, Cha (च) by a fish, Ta (त) by a man without the head, Ta (त) by the figure of a boat, Pa (प) by a leaf.

EGYPTIAN :

The sound Awa (॥) is represented by a net, A (ए) by a man with upraised hands, Ta (त) by a semicircle representing the sun's route in the day, Ta (त) by a boat, Pa (प) by a leaf.

INDUS :

Awa (॥) is expressed in writing by a net representing the net of sky where the sun as a fish is caught, A (ए) by a man with upraised hands, Ka (क) by a trunk of the body, Cha (च) by a fish, Ta (त) by the trunk of a man's body, Ta (त) by a boat and Pa (प) by a leaf.

CHINESE :

The sound Ka (क) is represented by the trunk of a man, Pa (प) by a leaf and Ya (य) by an eye.

BRAHMI :

The sound A (ए) is expressed in writing by a human trunk, Ka (क) by the same, figure Ta (त) by the lower portion of the human trunk, Ta (त) by the sun, Pa (प) by an eye, Sha (श) by a human trunk.

KHOROŠTRI :

The sound A (ए) is represented by an eye, Ka (क) by a human trunk with one hand, Ta (त) by the lower

MARUTA GROUP

Chart

THE RIGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

extremity of a man, Pa (प) by an eye, Sa (ष) by trunk of a man with one hand.

ETHIOPIC :

A (ए) is indicated by a human figure with two hands, neck and head, Ka (क) by a trunk of a man with one hand, Ta (त) by the trunk of a man, Ta (त) by the trunk of a man, Pa (प) by an eye, Sa (ष) by a trunk of a man.

HIMYRIATIC :

A (ए) is represented by the same figure as Ethiopic, Ka (क) by the trunk of a body with one hand, Ta (त) by a human trunk or by a human figure, Tha (थ) by a human figure, Pa (प) by an eye, Sa (ष) by a trunk.

MOABITE STONE :

The sound A (ए) is represented in writing by an eye, Ka (क) by a human trunk, Ta (त) by a human trunk, Pa (प) by an eye and Sa (ष) by a figure representing three celestial hills.

PHOENICIAN :

The sound A (ए) is indicated by an eye, Ka (क) by a human trunk, Ta (त) by a human trunk, Ta (त) by an eye, Sa (ष) by a figure representing three celestial hills.

GREEK :

A (ए) is expressed in writing by an eye, Ka (क) by a human trunk, Ta (त) by a human trunk, Ta (त) by an eye, Pa (प) by an eye, Sa (ष) by a human trunk or by two mountains.

LATIN :

The sound A (ए) is indicated by an eye, Ka (क) by a human trunk, Ta (त) by a human trunk, Pa (प) by an eye, Sa (ष) by a human trunk.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

GLAGOLITHIC :

The sound A (ए) is represented by the upper part of the human trunk, Ka (क) by the lower part, of the human trunk, Ta (त) by two eyes, Ta (त) by a jar, Pa (प) by an eye.

HEBREW :

The sound Awa (आ) is indicated by the figure of the river, Ka (क) by a human trunk, Ta (त) by a Jar, Ta (त) by the sky, Pa (प) by an eye, Ya (य) by an eye, Sha (ष) by the sun on the hill.

We have studied different varieties of alphabets and have seen all of them can be explained by the Tantric codes. Now we shall apply our theory to the words of the Indus scripts and try to decipher them with our clues.

INDUS SCRIPTS.



पानम पौ द्विप—The
Panam pau dwip.



पानम पैय द्विप—the
Panam Payai dwip.



पानमद्विप—the island
of marketing.

एकादशी—eleven—ऐ ।

THE RVVEDIC CULTURE OF THE PRE HISTORIC INDUS

	वद् or वद्। वद्—to divide, to ascend. वद्—a fool, pride, to protest. ¹
	मी (मधु)—honey. ²
	पद—to cook. ³
	उप—upon (reversed). ⁴
	पथ—water, milk. ⁵
	मत्त—dirts. ⁶
	नभ—the sky (reversed). ⁷
	अम—the man. ⁸
	बल—the strength.

- (1) काश्चम् (trunk)—व ; स्नानः—का, ट । हिनद् (two rivers) ड ।
- (2) कलस—jar—म, व ; उच्चं मुखौ—(one) with upturned face—ची ।
- (3) पाता—a leaf—प ; कच्छप—a tortoise—च । फ ।
- (4) एकमाद्र—one straight line—उ ।
- (5) मीन—a fish य ।
- (6) कलसी—a jar म ; वज्रयुप—Vazra-Yupa—म, ल ।
- (7) कलसीस्नान्दमारवाही—a carrier of burden with a jar on his head
—मस, मै ; चारि—four—च ।
- (8) आखा—a branch of a tree—ञ ; विरेष—three vertical perpen-
dicular straight lines—च ।

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

	भुविष्य—the Bhu island. ⁹
	कफम्—harsh words (reversed). ¹⁰
	नट्विष्य—the Natu island. ¹¹
	पञ्चविष्य—the Panya island.
	पथम्—the road. ¹²
	परम्—the price.
	मर—one that dies. ¹³
	मत (मध्य)—honey. ¹⁴
	ब्रह्मप— the ruler of man. ¹⁵
	चट्टम्—(reversed) made of grass. ¹⁶
	पचम्—cooking.
	सूर्यम्— ¹⁷

(9) द्वि-प—two Pas two suns. The place covered by two suns is called द्विप। The sun rises in the eastern side of the island from the ocean and sets in the western side of the island in the western ocean, thus the island is covered by two Pas or two suns. *

THE RIGVEDIC CULTURE OF THE PRE-HISTORIC INDUS



धूर्यु—the subterranean well, the spring.



जन एकेषि—one man.



पत्र च—the flesh.



कवच च—the drum, the amulet.



पत्रम—cooking.



भङ्ग—valla.¹⁸



उभम—both (reversed).



{ उट—grass, to go.
उच—a jar (colloquial—reversed).



धन—riches.

- (10) कक्ष्ट—a crab—फ ।
- (11) नदी—a river—ज । (here it is symbolic); कटि—a loin—ट ।
- (12) पाता—a leaf—प ; दस्तावी—a holder of stick—थ ।
- (13) सप्तजिङ्ग—the seven tongued—र ।
- (14) वज्रयुप—*the Vazra-Yupa*—म, ल ।
- (15) शाखा—a branch of a tree—ज ।
- (16) त्रिमात्रा—three strokes—उ । कपाली—a jar—ट ।
- (17) खान्दः—the trunk of the body—क । ट ; पञ्चान्तकः—the destroyer of five—ग ।
- (18) उद्धैकेषी—with erected hairs—ख ।

THE RGVEDIC CULTURE OF THE 'PRE-HISTORIC' INDUS

ଶ୍ରୀମଦ୍ଭଗବତ	ପଥବାଲିପି — the island of excessive rainfall.
ମଫୁ ବିଷ	ମଫୁ ବିଷ—the Mafu island. ¹⁹
ନଟମ ଏକେଖି	ନଟମ ଏକେଖି—one actor. ²⁰
ବଟୋ ହିଷ	ବଟୋ ହିଷ—the Botai island.
ଚ' ନମ୍	ଚ' ନମ୍—(reversed) the blue sky. ²¹
ପଳି	ପଳି—the silt. ²²
ପଞ୍ଚମ ଘ	ପଞ୍ଚମ ଘ—the price.
ମୟ ହିଷ	ମୟ ହିଷ — the Maya island, or the crab island. ²³
ପପନିଷିଷ	ପପନିଷିଷ—the Papan island.
ପଞ୍ଚମ ଏକେନ୍ତି	ପଞ୍ଚମ ଏକେନ୍ତି—one pana.

(19) त्रिपदक—the three leaved—फ ; गिर—a mountain—च ।
 (20) अर्हुम्बु—a half-moon—ए ; गळु—the cheek—लु ।
 (21) त्रिदिव—three heavens—च ।
 (22) त्रिकुटि—three mountains—लु ।
 (23) वृष्टि—the Vazra-Yupa—म, ल ।

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

Buffalo—गृः Rhinoceros—वृः Man—ऽः Loin—तः ऽः The Jar—स॒ ष। Fish—प॒ ष। Elephant—वृः The trunk of a man—कृः ऽः Tiger—उः Paśupati—गृः Goat—ऐः The reading is :

अलः पथ ततम् शुक्ले ।

The (aquatic) birds have covered all the water-ways.



The above Sanskrit sentence deciphered from the Sivapaśupati Seal of Mahenjodaro does not comply with the rules of the present-day Sanskrit grammar. It is of archaic origin and correct in accordance with the Vedic usage. About this, Panini also mentions : “व्यावयो वड्डम् (१।१।८५)” which is explained as सुषिक्षुपद्यनिष्ठिनराणां कालहत्या च सर कट्टयन्ता च । व्यावेयनिष्ठति शास्त्रादेवां सौऽपि च सिष्यति वाङ्मैत्री ।” वड्डम् of the grammatical rules means irregularities of the

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

Vedic literature. It mentions that in the Vedic literature 'vibhaktis' can be transferred from one word to the other in a sentence. According to this rule the Visarga of एकुणः of the above sentence has been added to वस्तु।⁴

From the above deciphered words we have seen that the language that is represented by the Indus scripts is Sanskrit. So, it fully substantiated our theory of origin of the script. Therefore we may say that it is in India where the script was discovered first. To substantiate further our theories we shall try to decipher the words of the most recently discovered script of Jaipur.

THE JAIPUR SCRIPT

	a	b	c	d	e	Left to Right.	Right to Left.
1						र चौ ल इ क (रीतिक)	भिलोर
2						र चौ श म क (रीतिक)	भास्त्रीर
3						र चौ श म इ (रीतिक)	इलशीर
4						र चौ श म इ (रीतिक)	इलशीर
5						न चौ ल न श (नीतिक)	शनखीर
6						न चौ ल न क (नीतिक)	शनखीर
7						र चौ ल श श इ (रीतिक)	शिशमीर

(4) For detailed discussion see appendix II.

THE RGVEDIC CULTURE OF THE PRE HISTORIC INDUS

The reading from both the ways gives us two sets of words. Moreover, there also may be other readings too. As for instance the c figure of 1, 5, 6, 7 and d of 2 and 3 have two readings न and ल।

Now it is the work of the historian to find out whether these names occur in the history or not. But the last name, we think, tally with the name of Ramesis, an Egyptian pharaoh. The Egypt was known to the ancient Aryas as 'Romaka'. So we may infer that the last name which means "the moon of the Roum" may be the name of the Egyptian pharaoh Ramesis.

line (1) (a) सूर्य—the sun—॒।

(b) चतुर्मुखः—the six faced—॒। त्रिशूल—a trident—॒।

(c) वज्र—the Vazra-Yupa—॒, ल्।

(d) अष्टूर—the seedling—॒, ॑।

(e) षष्ठ्यात्—the six elevations—॒।

line (2) (c) हस्ती—an elephant—॒।

line (3) (c) हृष्ण—the bull—॒। ष्।

line (4) (d) कुक्कुर—the dog—॒। ल्। ल्।

line (5) (a) प्रस्तयापि—the setting sun—॒। फ्।

(d) नदी—the river—॒।

line (7) (e) हृष—^१the bull—॒। पञ्चशूर—five arrows—॒।

THE RIGVEDIC CULTURE OF THE PRE-HISTORIC INDUS CUNIFORM SCRIPT

Quite separate from all other systems are three cuneiform systems of alphabets which show no apparent affinity to any other known alphabets.

(1)	<p>► च—गिरिजः—born of the mountain—च ॥ श</p> <p>◀ च—गिरि—the mountain—च । ट । द । व । श</p> <p>► ए—चतुर्भूती—the hair standing erect—ए ॥ श</p> <p>► इ—पञ्चशर—five arrows—इ । उ । क । ि</p> <p>► ई—चट्टशर—eight arrows—ई (ई according to Ballhorn). i</p> <p>► ई—पञ्चशर—five arrows—इ । उ । क । ि</p>
(2)	<p>► अ—स्तन्द—<u>the trunk.</u>—क—ट ; ा</p> <p>◀ अ—शाखा—<u>the bough</u>—ज । Sh</p> <p>► क—स्तन्दः—<u>the trunk of the body</u>—क । k</p> <p>► वज्र (मः)—व—<u>the Vazra-Yupa</u>—म, व—nue</p>

(1) Median.
 (2) Assyrian.

THE AGEDIC CULTURE OF THE PRE-HISTORIC INDUS

The sound value of the Cuniform alphabets as discovered by the western scholars has been corroborated by the Tantras.

From the above charts we see that all the alphabets of the world can be explained or deciphered with the help of the Tāntric science of script. The Cuniform alphabet which formed a distinct group among the alphabets can be explained also by the Tantric science of the script. So, it is now easy to infer that all the scripts arose in India, India is the birth place of the script and the Vedic Āryas have created the script to express their idea in black and white. We have seen there were independent groups of scripts, written with the help of different animate and inanimate objects. But in the field of scripts we find that all these different systems have lost their identity and, generally speaking, all the scripts are but conglomeration of alphabets of different systems of scripts. Only in one case we find that the integrity of the system has been maintained and that is the Cuniform system of script. In this system it is the arrow-head or spear-head which has been used in different arrangements. From the study of the Cuniform script we come upon a new clue to decipher the alphabets. Here we find different arrangements of the same number of spear-heads standing for the separate sounds. Thus a representation of five arrows stand for अ, and ए। This representation has solved a knotty problem in the decipherment of the Tāntric script, because we are puzzled to find that the same object has been used to represent three, four or five sounds. As for instance पञ्चर् or the picture of 'five arrow-heads' has been used to represent three sounds क, ख, and च। अ and ए has been represented in the Cuniform system by two different arrangements while the arrangement of the five arrows for the sound ए is lost. In this way picture of the same object in different arrangements or postures stand for different

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

sounds. Thus we find that these systems of pictographic scripts are inter-related and what is wanting in one may be supplied by the other. The Tantras, of course, are the greatest factor in the decipherment of the script, being the mother of all the scripts present on the globe.

From what we have discussed above about scripts we sum up the conclusion in broad outlines as : The early scripts were pictograms. The pictographic scripts are not ideograms as held by some of the western scholars. As all the different pictographic alphabets can be explained by the clues preserved in the Tantric Codes we assume that they are of common origin. Moreover, the Tantric science of script has been proved to be correct as it corroborates the sound values of Egyptian, Assyrian and Chinese pictograms deciphered by Egyptologists, Assyriologists and Sinologists. Thus, we see, the Tantras contain the universal science of script-building.

CHAPTER IV

THE TANTRIC DEITIES AND THEIR RELATION TO THE VEDIC GODS

From clans to communities and communities to a nation, the change in the society did not come at once. The process took a long time. In the beginning the three communities Deva, Manuṣya and Rākṣasa combined to form the Ārya nation with a standardised culture. Other communities joined gradually. The process of unification went on and in course of time even after the Buddhistic regime the independent communities were absorbed in the Ārya nation. We have seen before how the three community-dialects of the Deva, Nara and Rākṣasa combined to form the Sanskrit language—how the sun who was at first a clan god became a community god and finally was identified with the supreme god of the Vedic Āryas, the supreme deity, in whom were merged all the clan gods called by different names in different clans, such as Indra, Mithra, Varuna and various other names. In the Vedas we find the Ārya Ṛṣi re-iterating the principle of unity, the fundamental characteristic of the Āryas, again and again to silence the notes of discord among the diverse clans that tried to raise their heads now and then even after the amalgamation of communities to form a nation and declaring in a forceful voice: 'He who is the Lord of the universe has been called Indra, Mithra, Varuṇa, Agni, the beautifully feathered heavenly bird Garutman and Matariśvan. These are but the various names of the one and the same supreme deity given by different sages.' In

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

in the later Vedic period we find that the plan of amalgamation has been nearly carried out and the different clan gods retained their existence only in different names of the one supreme God.

In the Vedas the supreme deity is the male principle of the universe. It is striking that in the Tantras the supreme deity is the female principle. In the Vedas we get only one reference of a female deity, the Aditi, while the Tantras mention a host of female deities. While the Vedas mention Mithra, Varuna, Agni, Indra and a host of male deities, the Tantras mention the Kali, Durgā, Kulakundali, Chandi, Vairavi and others. Thus we see that the conception of the universal spirit as a male principle was changed in the hands of the Tāntric Sādhakas to a female principle.

In the Tantras we come across the male gods, the Śiva, Sadāśiva or Mahākāla Vairava, and female goddesses the Śakti, Kāli, Tārā etc. The Śiva is the supreme deity. He is formless and nameless and beyond all gunas and activities. He is an all-pervading existence, infinite and unconditioned. No colour of activity can taint him. He is the repository of all the contradictory qualities. He is beyond all phenomena and yet the source of all phenomena. He is the Brahman—the existence, knowledge and bliss absolute of the Vedāntins. His Tāntric code is *Houng* (ॐ) which means the sky. Hence the Śiva is the sky, the Dyāvā of the Vedas.

In ancient times there was worship of a mother goddess along with a male god. In the Vedic period she was worshipped as the Aditi, the divine virgin in India. In countries out side of India and around the Mediterranean seas she was worshipped as a virgin like Isis in Egypt, Isthār in Babylonia, Cybele in Phrygia, Aphrodite in Greece and Astartes in Cyprus. The divine mother was conceived in all these cases as a virgin. She gave birth to the first god

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

by immaculate conception. All the above mentioned virgins have been unified in the virgin Mary of the Christians in the west, while in India the Vedic virgin Aditi has been merged into the mother Kāli who is called by various names, such as the Umā, Tārā, Durgā, Kulakundali etc.

The Aditi is the Pr̄thivi of the Dyāvā-Pr̄thivi. Her children are the Ādityas, the bright spirits. In post-Vedic period her functions were divided in her relation to the rising and the setting sun. She retained her name in relation to the rising sun, while in relation to the setting sun she took the new name Diti. Thus, the Diti, a hitherto unknown goddess, appeared in the pantheon of gods in the Purāṇas. As a contrast to the Aditi, the Diti was conceived as the mother of all the evil spirits, the Daityas. Being connected with the setting sun, the Diti automatically appeared as a deity who caused the death of the sun. The Diti therefore was called the destroyer and as such was depicted as dancing over the dead god, the sun who went down beneath her in setting. She brought night and consequently the darkness, hence she was depicted as a black goddess and is called the Kālārātri and the Mahārātri in the Chandi. She danced in company with evil spirits that came out in the night. From the physical phenomena of darkness and brightness, the setting and the rising of the sun, further finer conceptions came in. Darkness was compared with ignorance and brightness with intelligence. The black goddess Diti, therefore, was called the creator of ignorance and destroyer of knowledge. The Aditi who brought up the sun in the morning spread brightness all over the world and being the revealer of objects was called the creator of knowledge and destroyer of ignorance. Thus both the deities Diti and Aditi who were conceived from one earth goddess with two different phenomena were worshipped among the descendants of the Vedic people as representing the two opposite forces, light and darkness, creation and

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

destruction, life and death, knowledge and ignorance. During the age of the Tantras the two deities were again unified and the unified deity came to be known as Kāli the mother. When she puts forth life she is Aditi the creator and she is the Diti when she brings down death on the earth. The Aditi, Diti, as well as the mother Kāli, all have their Tāntric codes meaning the earth. Thus while the Aditi and the Diti have their earth codes in *Long* (ં), the mother Kali has her earth code in *Kling* (ક્લિં). It is now clear how the earth goddess of the Vedas, the Aditi or the Pṛthivi, undergoing different phases of evolution, has been transformed finally into the mother Kāli. The Vedic deities, the Dyou (દ્વીઃ) or the sky and the Pṛthivi, are still retaining their existence in the guise of the Tāntric deities, the Śiva and the mother Kāli.

There is a conception of a second female deity who is called the Śakti. The Śakti is the deity conceived from the sun and not from the Pṛthivi, the earth. The Kāli is the deity conceived from the earth. So, the Śakti is not akin to the mother Kāli. Her difference from the Kāli is distinctly shown in her codes Hring (હ્રિં), Kring (ક્રિં), A (ા), Ka (કા), E (એ), Ai (ઐ), Kha (ખા), R (ર) and Hosou (હોસુ), which are not the earth codes. These codes of the Śakti represent the three deities, the sun, the fire and the water or the Soma. The first four codes represent the sun, the last two the water and Ai (ઐ) and Kha (ખા) represent the fire. These three deities of the Vedas are actually the three manifestations of the one god, the sun, with the two aspects of male and female. The fire and the solar codes represent the male aspect of the sun while the Soma or water represents the female aspect. The Śakti is therefore a composite of the male and the female principles like the sun. This composition of the two has been well illustrated by the Tantras when they compare the Śakti with the seed of

THE RVEDIC CULTURE OF THE PRE-HISTORIC INDUS

Tentils which possesses two equal halves within one sheath. The male and the female principles of the universe represented by the Śakti are as inseparable as the fire and its consuming power or as the sun and its energy. The Śakti has been depicted in the Tantras as the Ardha-Nāriśwara, the half-male and half-female form. In the female aspect the Śakti is the mother of all life and in the male aspect the Mahākāla Vairava the father. This conception of the two in one has come down from the Vedas where the sun and its energy are taken to be one as we find in the expressions वृश्चिकोमात्रा and इन्द्रसीमात्रा etc.

The two aforesaid female deities have created confusion in the minds of the later descendants of the Āryas and they made confused remarks about the two—now about the Śakti and then about the Kāli. This erroneous view caused the people to designate the Śakti as the Kāli dancing on the dead god. The dead god, as we have seen before, is not the sky, but the sun; hence the dance of the Śakti on the dead sun is incompatible with her actual nature revealed by the Tāntric codes. The dancing goddess over the dead god is the Kāli with the earth code and the dead god is the sun. In this respect the Śakti becomes the dead god upon whom dances the mother Kali. Moreover, the dead god is not the Śiva, it is Sadāśiva, the Mahākāla Vairava, the Vedic Rudra. The Vedic Rudra who plays the role of the Sakti in the Tāntric literatures is actually the son of the mother Kāli, the earth, from whose womb the said god comes out in the morning. The Śakti, the sun, plays in the ocean of the sky which is called the Śiva. The Śakti, like the Gāyatrī, brings life on the earth as the morning sun by resuscitating the universe from the sleep which resembles the death. She preserves the earth as the midday sun and destroys the universe in the role of the evening sun which by setting brings sleep or the diurnal death. From

THE RVEDIC CULTURE OF THE PRE-HISTORIC INDUS

in this phenomena the theory of the creation and preservation and destruction by the one and the same deity dawned upon the minds of the Āryas. In course of time these three phases of the solar existence in the sky were personified and called the Brahmā, Viṣṇu and Rudra.

The Dyāvā, Prithivi and the sun, the three main deities of the early Vedic periods, thus entered to form the Tāntric pantheon of the gods. Different in names and forms the Tāntric deities retain their Vedic nature in their secret or code names. Thus we find that the Śiva represents the sky, the Kāli the earth and the Sakti the sun in his three-fold manifestations, the sun, fire and rain.

Being the Dyāvā of the Vedas, the Śiva is conceived as an abstract existence. The Śiva being beyond all names, forms and attributes cannot be worshipped. The human mind can not reach that abstract conception. The Tāntric sages therefore conceived Sadāśiva, the Mahākāla Vairava, a god with the solar code *Hring* (ॐ) and *Pa* (प). He is confounded with the Śiva and wrongly called the Śiva by a great majority of the people. But in fact he is the Rudra of the Vedas.

The phenomenon of the five faces of the Sadaśivā is also traceable to the Vedic Rudra. The five faces, Sadyajāta Tatpuruṣa, Vāmadeva, Aghora and Isāna of the Sadaśiva or the Mahākāla Vairava, correspond with the five faces of the Rudra. The apparent difference in the names of the faces of the two deities are very superficial, the names of the faces of the two gods being synonymous. While the Sadāśiva has his eastern face Sadyajāta, the Rudra has his eastern face in the Agni. The Agni is the Sadyajāta in the Vedas. The south face of the Sadaśiva is the Tatpuruṣa and the south face of the Rudra is Indra. The Rudra is the Tatpuruṣa in the Vedas. The western face of the Sadaśiva is the Vāmadeva and the western face of the Rudra is the Varuṇa. 'The Vāmā

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

is the Varuna' says the Brāhmaṇas. The northern face of the Sadāśiva is the Aghora and the northern face of the Rudra is the Soma. The Aghora means darkness and the Soma is the cloud that produces darkness. The upper face of the Sadaśiva is the Isāna and the upper face of the Rudra is Brahman. 'The Isāna is the sun' says the Brāhmaṇas. 'Brahmaṇa is the Āditya' says the Brāhmaṇas.

The eight murtis of the Mahākāla are nothing but the rays of the sun scattered in eight directions. These rays are personified in the Tantras. The Mahākāla who is the Vedic Rudra surveys the universe by his eight forms, the earth, water, fire, Vāyu, Ākāśa, Jajmāna, Soma and the sun.

The Mahākāla measures Kāla or time in his role of the sun by his diurnal movement. The Mahākāla destroys or darkens the world by his setting in the evening, enlivens it by its rising in the morning and preserves it at midday. The Mahākāla of the Tantras may be further compared with the Vedic sun-god Rudra. Like the Rudra he is easily propitiated. He is the Āśutoṣa, or the easily satisfied. A few Vilva leaves, a pinch of rice, and a palmful of water are sufficient to satisfy him. No caste, no sex, no age, no creed is a bar to propitiate him the ever merciful.

Like the Rudra the solar deity, who is worshipped on the Yugas, the Mahākāla is worshipped on the Śivalinga. The Yugas of the Vedas and the Śivalingas of the Tantras are similar in origin and functions. The Prantosini says :

मूले ब्रह्मा वसति भगवान् भज्यभागेष विष्णुः ।

अयं शम्भुः पश्चपतिः रजीवद्वरेष्यः ।

तत्त्वात् विष्णुं सुरतत्वं स्थापयेत् ।⁶

'In the root of the Śivalinga sits Bhagavan Brahmā, at the middle sits the Viṣṇu, on the top sits Śambhu the fiery

(5) माण्डोविष्णीतत्व, p. 257.

THE ḌGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

destroyer and king of Paśus, seers (with his head projecting outside). Hence, such a Linga which represents the *Surataru* (sky-tree) must be installed in every house.' In this quotation we find that the Śivalinga has been called the *Surataru*, the celestial tree. This celestial tree has been designated in the Vedas as the *Vanaspati* and is popularly called the sky-tree. As a seat of the deity it is similar to the Vedic Yugas, the representation of the sky-tree. The Vazra on the top of the Śivalinga further illustrates its similarity to the Vedic Yugas, because this Vazra resembles the Yupa-kataka. Like the Yupa, the Śivalinga also is made 'in various forms and out of various materials. The most peculiar features of these materials are that like the Yupa. The Śivalinga is also made out of the wood.⁶—एवं वै दार्ढा चेष्ट विकल्पः तथापुः। In this respect too, the Śivalinga resembles a Yupa. Śwāmi Vivekānanda in one of his discourses supports this view and expresses that the Śivalinga might be the representation of the Vedic Yupa.

We now come to another phase of similarity between the Vedic and the Tāntric gods. We have seen that the sun was worshipped as a snake in the Vedic period. The same thing is also seen in the Tantras. The Tantras also prescribe the worship of the serpent deity Kulakundali. The serpent has its code of fire in Thah (॥). The fire being a representation of the sun, the serpent with a fire code stands actually for the solar deity. This serpent shape of the sun that entwines the Śivaliṅga in three coils is the representation of the Kuśa rope that entwined the Vedic Yupa in three circuits. This Kuśa rope actually stood for the three manifestations of the solar deities Brahmā, Viṣṇu and Rudra. In the case of the Śivaliṅga too, we have found previously that the three gods Brahmā, Viṣṇu and Rudra sit in the three

(6) प्राणतीर्थीतम्, p. 252.

THE BOVEDIC CULTURE OF THE PRE-HISTORIC INDUS

parts of it. The downturned head of the Śivaliṅga in the Muļādhāra with the Kulakundali asleep, represents the sky-tree in its nocturnal phase when it goes down headlong with the Rudra sitting on its top. The head of the Rudra automatically goes downwards. This nocturnal phenomenon of the setting sun and the sky-tree gave rise to the idea of the downturned Śivaliṅga with the sleeping deity Kulakundali, with her head put on the apex. The night is dark and the sleeping time for the sun, hence it is conceived that the individual soul represented by the Kulakundali is sleeping being covered by the darkness of ignorance.

There also arose many other conceptions from the phenomena of the sunrise and sunset. These phenomena, though originated separately, have been studded together later and quite a new theory has been put forward. Thus the Śatcakra, Idā, Piṅgalā and Suṣumnā, all separate conceptions regarding the solar phenomena, have been grouped together with the conception of the solar serpent Kulakundali in laying out the Tāntric philosophy of emancipation.

The Śatcakra means the earth, because it has the earth code in Da (❖). The piercing of the Śatcakra, therefore, is the piercing of the earth by the sun in the morning. The Idā is the earth because its Tāntric code is La (■), which is an earth-code. The Piṅgalā is the sky because its code is Houng (❀) meaning the sky. The Sumanā is the sun because its code is E (●), the fire code. The fire and the sun being identical the Sumanā is the sun. In these conceptions the Vedic deities, the sun, the sky and the earth play all the parts.

The Tantras state that the way of Idā and Piṅgalā is a path of continuous flux. The individual soul cannot be emancipated from this eternal coming and going through these

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

two routes. As the sun rises in the morning and travels by the sky which is the Pingalâ, and then sets and travels in the underworld which is Idâ or the earth, the individual soul comes and goes through births and deaths. The sun who is compared to the soul is called Sumanâ. This Sumanâ or the soul travels by these two routes from eternity to eternity and there seems no getting out of this path of the eternal flux. The later Tântric philosophers, who gradually lost the clue to the fundamental principles on which the Tântric rites and rituals were built, put forward new and novel interpretation of the old Tântric conceptions. They threaded together all the above conceptions of the solar phenomena. The meaning of the Šatchakra was changed to six circles and an imaginary meridian path that lies flat on the earth was conceived for the Sumanâ which was called the Sušumnâ-vartmanâ. They laid the six imaginary circles in this Vartman or the path. These six concentric circles represents the six intermediary stages or mental planes on the course of the evolution of the soul. The soul leaving the path of the Idâ and Piṅgalâ, the path of the eternal flux, travels through this meridian passage the Sušumnâ-vartman and gradually pierces the Chakras, which are mental planes, one after another and reaches the highest illumination by the piercing of the Ājñâchakra the last and finest bond of ignorance. As on its way the individual soul progresses by piercing the Chakras one after the other, different realms of existence unfold themselves and appear.

The above conception of the soul's eternal coming and going, has been based on the sun's eternal rising and setting. The sun rises daily on the celestial tree and sets after completing the heavenly circuit on that tree, which goes with its head downwards in its circular movement. The phenomenon of the eternal flux of the soul that is connected with this celestial tree which is called Aśvattha

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

(अश्व)' has been narrated in the Katho-upaniṣad (कथोपनिषद्) and Gitā (गीता). There it is said that the relation with this tree of light which has its root in the Heavens and the branches downwards, is the cause of the eternal flux of the individual soul. The individual soul, which is compared with the solar deity, that takes refuge in this celestial tree of light or world tree, cannot think of getting emancipation from this celestial tree of light which always move in a circle, and from a circle there is no way out. But when an individual soul being dissatisfied with this eternal coming and going, gets tired of it and wishes to put a stop to this and gets down from this tree, which we call world-tree, then by this non-connection—non-attachment (अव्याप्तिशेष) to the world-tree he forfeits all the future coming and going and walks in the straight meridian path, called Suṣumanā Vartman in the Tantras, that pierces the circular path of Iḍa and Piṅgalā, at their conjunctions both-ways and gets emancipated. This point of conjunction of Iḍa and Piṅgalā which the individual soul pierces is called the Ājñachakra by the Tāntric. After piercing of this Chakra no bondage remains and the freed soul enjoys eternal felicity and happiness and swims in the ocean of eternal existence, knowledge and bliss (ब्रह्मदानद), never again to be fettered.

The individual soul has been conceived in this phenomenon as a snake who is sleeping in the Māladhāra with its head put on the apex of the down-turned Śivalīṅga. Thus we have seen from the above discussion how the sun, who was represented in the Vedas as a snake, and as three circuits of a Kuśagrass of the Yupa, has changed itself to the Kulakundali in the time of the Tantras and together with other separate and independent solar phenomena gave rise to the aforesaid philosophical conceptions.

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

The sky-tree, the seat of the solar deity, and its symbol, the Yupa gave rise to various other conceptions besides that of the Śivalīṅga. The Mandala, Mandira, Yantra, Ghata and Pratimā are actually the representations either of the Vedic group of the Yugas or of the central Yupa. The Mandala and the Mandira are the representations of the groups of the Yupa, while the Śivalīṅga, Yantra, Ghata and Pratimā are the symbols of the central Yupa. Like various arrangements of the Vedic Yugas which are used in different sacrifices there are many varieties of the Yantras which are employed in the worship of the different Tāntric deities. In the following chart the Sarvabhadra-Mandala represents the Vedic group of twenty one Yugas, which were used in the time of the Aśvamedha sacrifice. The Pañchāvja-Mandala aptly symbolises the group of the five Yugas used in the time of a Vṛṣotsarga. The Yantras are the plane representations of the central Yupa. The eight petals of lotus in the Yantra represents the eight angles of a Yupa which was its universal aspect, while the circle, triangle and hexagons represent the top of the central Yupa.

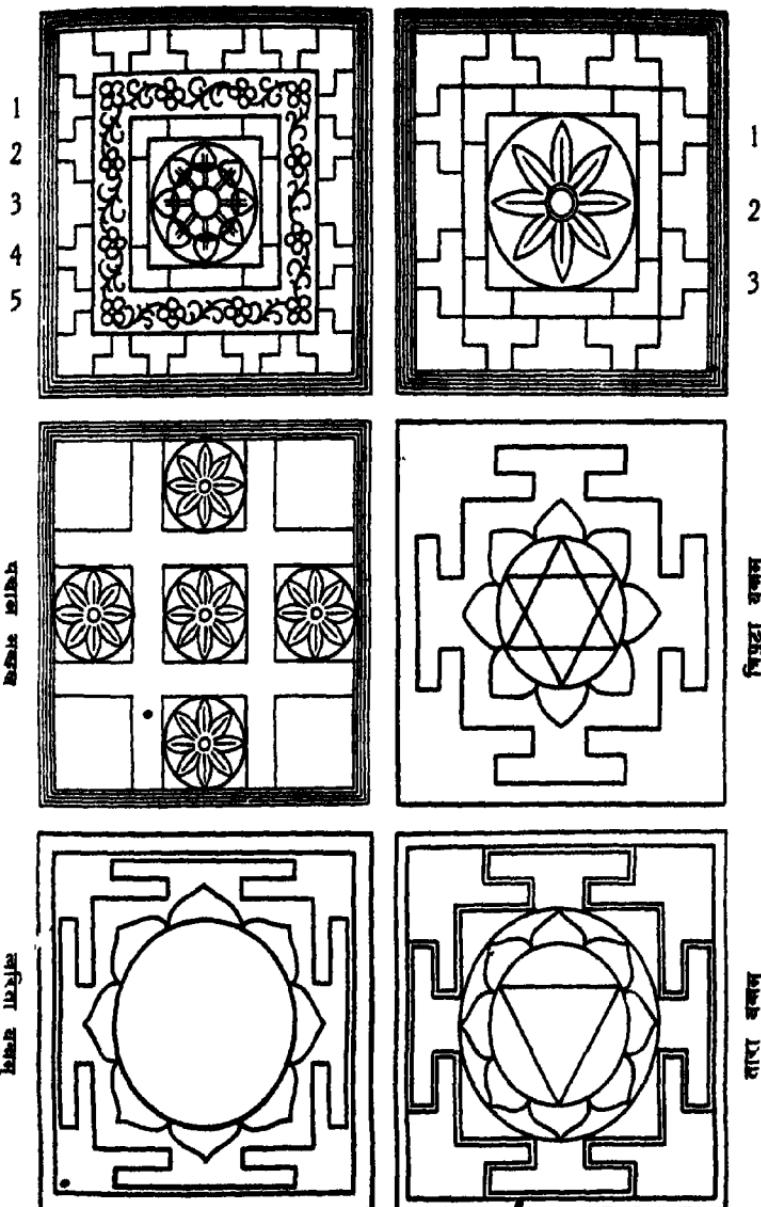
The Ghata is a pitcher full of water with a mango twig put into it. The pitcher is put at the centre of a square with four sticks at the four corners entwined by cotton strings. These outer four sticks represent the four outer Yugas, the mango twig, the central or Vazra Yuga, the fruit over the twig the sun and the Ghata, the ocean of the sky. The Pratimā is the human figure of the deity. It corresponds to the central Yuga being the seat of the deity. The worship of the Pratimā came into vogue in the later Brāhmaṇic period when the Āryas used to cut human figure seated in a house in the upper end of the Yuga. This conception was the seed of the future temples of gods and goddesses.

The sacred tree, represented by Yupa, which is the habitat,

Yantra and Mandala

सर्वतीर्थमन्तर्याम

सर्व उत्तीर्णमन्तर्याम



THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

or dwelling of the deity gave rise, in the course of time, to temple. We know that the Jehova of Moses was "He that dwelt in the bush." This haunt or home of the god was adored and offering were put beneath it. "The solitary tree standing in Attic field and worshipped as the sacred habitation of the god was in all probability the earliest Greek temple, the forerunner of those marvellous edifices which have aroused the admiration of every subsequent age." This conception of a temple as the habitat of the god did actually arise out of the primitive tree and tree trunk worship which were thought as haunted and inhabited by the god. In some places the tree trunk was given an actual human form to represent the deity. The most interesting and unexplainable phenomenon is connected with the carved fig tree of the Sicilian peasants with three legs. 'A right holy precincts runs round it, and a ceaseless stream that falleth from the rocks on every side is green with laurels and myrtles and fragrant cypresses.'

This custom of carving a tree into the semblance of a god and subsequently worshipping it as his sanctuary or symbol was current in many parts of the world. It is said to have been a practice amongst the Druids. When an oak tree is dried, it is stripped of its bark and is shaped into a pillar, Pyramid or a cross, and is continued to be worshipped as an emblem of the god. The three footed tree of the Sicilian peasant, which represents their god, symbolises the three stages of the sun in the sky, the three footed Aśva as well as the three footed Vāmana, incarnation of the God Viṣṇu. Thus, we see that the tree worship is connected with the sun worship. This view is further supported by the fact that the winged circle, in conjunction with the sacred tree, in Assyrian pictures, represented the primeval cosmogenic pair, the creative sun and the fertile earth, and was a divine mystery of generation.'

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

In any case the final conclusion arrived at is that the tree-worship was connected with the sun-worship and the tree was thought as the dwelling place or dwelling house of the solar deity. In course of time this crude conception gave rise to a dwelling house of the worshipped deity which was the temple. For sometime past I was looking for a solution to the problem of the appearance of the temple with perplexity. Now, it is clear that it is the solar-residence, the celestial tree, what has become the temple, after passing through gradual processes of transformation. It was first changed to a trees-stump or pole, which is called Yupa in India.. In India, therefore, this Yupa is the forerunner of temples. In the Brâhmaṇas we read: 'The Stupa is nothing but the Yupa.' Thus, we find another link in the process of the transformation of the celestial tree to the temple. In this respect the Stupas of the Buddhists are the representatives of the Vedic Yupa, and lie between the Vedic Yupa and the temple.

This Buddhistic stupa in the course of time has been transformed to the magnificent temples of India. It should not be assumed that the Buddhists were the first builders of Stupas. The existence of the Stupas in the pre-Buddhistic period is proved by the presence in the Brâhmaṇas of the mention of Stupa and that also as a variety of the Vedic Yupa. The octagonal shape of the plinth of the Chaukhandi Stupa of Sâranâth amply testifies to its Yupa nature, because Vedic Yugas were made octagonal.

The construction of the temples with five, nine, thirteen, seventeen and twenty-one odd numbers of Chudâs reminds one of the odd groupings of the Yugas in a sacrifice. The temples may be taken as the solid representations of the group of the Yugas, while the Mandalas are the diagrammatic representations.

Thus we find how the Vedic conception of the sky-tree

THE BGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

and the Yupa have been transformed to the Śivalinga, and gradually into the Mandala, Yantra, Ghata, Mandira and Pratimā.

On the point of regard towards the woman, as we have seen before, the Tantras voice the Vedic injunction. The Tantras have re-instated her in her former glory. She is adored as the earthly manifestation of the mother Divine. She is not deprived of her rights to be an Āchārya and confer the Dikṣā, which is the greatest honour to a human being. Thus in upholding the Vedic conception the Tantras follow the Vedas, thereby we can conclude that the Tantras are of post-Vedic origin. Hence, the presence of the Tāntric deities, and the Tāntric script in the Indus cities, prove once for all that the Indus Civilization was post-Vedic, and not pre-Vedic in origin and the Āryas were the founders of the city.

CHAPTER V

The Egyptian Hieroglyphics

The discovery of Egyptian Papyri gave a great impetus to the Egyptological research. Egyptologists devoted their heart and soul to unlock the door-way of that ancient cave of wisdom. In course of time they discovered the 'Rosetta' stone. With its help they tried to decipher the hieroglyphical characters, and to speak the truth, they have succeeded in deciphering, some at least, of that ancient picture-writing. But unfortunately they could not decipher all the pictures and consequently they thought that the Egyptian hieroglyphics were ideo-phonetic—partly phonetic and partly ideo-graphic in nature. This conclusion made them toil in another field and they nearly succeeded in recording the names of all the ideograms which could not be deciphered in their phonetic values. So, in fact, the study in the Egyptian hieroglyphics have been, since then, an intellectual gymnastic. For instance, in a whole sentence, as deciphered by the Western scholars, there are two or three alphabets with phonetic values and remaining pictures have been deciphered as ideograms and their names have been put down besides these phonetic values, thus imparting quite a quaint and fantastic appearance to the whole structure. The greatest achievement, however, of the European scholars, in the field of Egyptology, as we have said before, is their success in collecting the probable designations of nearly all the hieroglyphical characters. This effort on their part has been, in the opinion of the present writer, a very

THE RVVEDIC CULTURE OF THE PRE-HISTORIC INDUS

nice piece of pioneering work, with the help of which the decipherment of these picture has become easier.

The Tantric codes, on the otherhand, is the only clue, as we have seen, to decipher all the picture words or pictograms.

In the following pages we shall try to apply the Tantric code to decipher some of the Egyptian hieroglyphics.

Egyptian name	Pictogram	Tantric name	Sound value
Khepra —		खापरा	— ख
Xut —		(चुत) चुता	— च
Rit —		चूतम्	— च : चं
Ā —		आः	— आ : अ : अं
Ari —		अह	— अ : ।
Nut —		नुतिः	— न : नमः
Neteru —		नेता (वाता) a flag	— न : ।
Māat —		नायाम्बरा	— म : ।
Mut —		मुत	— म : ।
Ba —		बाः (वयः)	— व : वं
Sutten —		सुतमा	— र : रं

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

In the above chart the similarity of the Tantric and the Egyptian nomenclature of the picture is very striking. While a rectangular figure with opening below has been designated as Xut, in the Egyptian language, the Tantra designates the same as "Xudhâ" a derivative of the word Xut (खृ). The alphabet for which this figure stands is ष (V). The letter ष (V) is a water-code and the picture may be recognised as the celestial tank with the lower base open, through which the rain falls. The figure of a woman has been designated as Nut in Egyptian and Nuti (नुति) in Sanskrit. The figure stands for the alphabet न (N). This alphabet is a code for the sky. We know that the goddess Nut of Egypt is the sky-goddess. The figure of a crane stands for the sound 'ऋ' (V), ऋ (V) is a water code. Being an aquatic bird it rightly represents the water. The figure of a seedling stands for the code ए (E). It is called Suttē in Egyptian and Sutrāma सूत्रामा in Sanskrit. सूत्रामा means the thread-like spirit that inhabits the body. The alphabet for this pictogram represents fire. The fire was ignited by the rubbing of two pieces of wood in the Vedic India and the Āryas thought that the fire resided in the wood just like a seedling resides in a seed. Moreover the ignited fire, in its primary stage was very small and resembled a seedling.

THE RIGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

Egyptian name	Pictogram	Tantric name	Sound value
Hetep —		हेति:	— फट् ।
Ānet —		आन्त	— इ ।
Neteru —		विनेत्र	— ए ।
Mit —		मित्र (मित्रा)	— म ।
Āb		आपः	— ए । अ
Ān		एष्टिलक्षः	— ई । ऊँ । स । द्वा
Sura		सुरः	— क । च । म
Abtak		आतः	— अ
U }		— } उः	— ए । ग । स । इ
U }		— } उः	— ए । ग । स । इ
Neb —		नव	— ' (ए)

In this chart the square figure named Hetep in Egyptian and Heti (हेति) in Sanskrit represents the sound Fat (फट्). Fat means fire. This square therefore is the diagram of the fireplace of a Jajñā. The figure of a jar with water coming out of it is Āb in Egyptian and Āpah (आपः) in Sanskrit and stands for the alphabet ए (V). ए (V) is a water code. The word Āpah (आपः) also means water. Thus we find that the pictograms or the Egyptian hieroglyphics actually stand for specific alphabets, they are neither ideographic nor ideo-phonetic in nature, they are purely phonetic.

The Conclusion

In our study into the culture of the pre-historic people inhabiting the fertile valley of the Indus we have began by comparing the two great literatures of the Āryas the Vedas and the Tantras. The first chapter of the book has been devoted to the study of the Vedic deities and rites. The second, third and the fourth chapters have been, practicaly speaking, devoted to the study of the Tantric deities, rites and language. In our survey of the Vedic rites we have found that the word Aśva has been used in the Vedas to mean the 'Sun' and not the 'horse' as we now understand by the word. In the preceeding volume we have tried to prove this. In this volume we have dealt elabontely the question and with references culled from the R̥g-Veda, Yajurveda, Brāhmaṇas, Upaniṣads and Purāṇas we have established our theory, "the horse was unknown to the Vedic people." We have further added an appendix on Aśvamedha in which we have explainged the major portion of the stanzas dealing with Aśvamedha. Our conclusion about Aśva cuts to the root to all the mushroom-theories about an Aryan immigration near about 1500 B. C. The absence of the horse therefore, from the pre-historic Indus cities is a strong proof of the Ārya or the Vedic origin of the civilization.

The imagery tree of light called Vanaspati in the Vedas, Vilva, Uduṃvara in Purāṇas, Kalpalatikā, Kalpabrikṣa and Ālaklatā in the Tāntras has a great influence over the ancient as well as the modern Indian culture. Being the seat of the sun it has been represented by Yupa in the Vedas and Śivalinga Ghata, Yantra and Pratimā in the Tantras. Indus finds show clearly the presence of the Yupa (fig 531, plate CIV) Yantra (fig 26N. Pl. XC III)

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

and Śivalinga, hence, the finds betray the existence of the Vedic people in the region.

The Vedic people worshipped the sun as a snake, a bird, a bull, and a buffelo. The Tantra also corroborates the Vedic conception by its codes. Thus the snake has a fire code in ॥ The bird Śyena Garutman has its code of fire in ॥, the fire being the earthly manifestation of the sun, fire and the sun are the same. The bull has its solar code in ॥, The one horned animal recognised as Unicorn has its solar codes in ॥, The Buffelo has its solar code in ॥. The religious symbols, Bull, Buffelo, and the one horned animals were therefore the symbols for the sun. Their presence is a strong proof of the Ārya occupation of the Indus cities.

- The mother earth was worshipped as Aditi in the Vedic times. She is the mother Kali of the Tantras with the earth code ॥. Her presence in the Indus cities cannot be denied because her picture with a tree coming out of her genitalia has been unearthed. The tree is nothing but the symbol of the celestial tree of light over which the sun ascends daily. Her presence in the ruins of the early civilization proves the Vedic origin of the culture of the people.

The final and surest proof of the Vedic origin of the city and culture is the script. In our investigation we have found that the Indus script is the forerunner of the early Indian script called Brāhma. The language deciphered with the help of the Tantric codes proved to be early Sanskrit. Therefore we confidently conclude by saying that the Indus civilization was Vedic in origin.

As a side issue we have found out that the alphabets were first discovered in India and Tantras are the record of that discovery. The Jaipur script is the exact

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

representation of the Tantric alphabets, Egyptian comes next. Then comes Indus and lastly the Chinese. The Cuneiform alphabets of Persia Media and Assyria also yield to the Tantric way of decipherment. So, it is proved beyond doubt that the Vedic Aryas were the inventer of the script.

APPENDIX I

ASVAMEDHA

यस्ते अहन् संवत्सरे महिमा संवभव । शु० च० वाज. २३।२
यः अहन् (day) सः ते (yours) संवत्सरे (in one year) महिमा (manifestation) संवभव (was) ।

“What is Ahan (a day), is a year of your manifestation.” Here, we come across the idea that a solar year is nothing but a day. Similar reference is found in the Brhadâranyaka Upaniṣad too in the following passage:

एष ह वा अश्वमेषो य एष तपति, तस्य संवत्सरं आत्मा ।

It is this Asvamedha (Sun) that gives heat and light, his self (life) is one year. श० आ० १।२।३

अहर्व अस्य पुरस्लान्महिमान्वजायत, तथ्य पूर्वेसमुद्रे योनि । रात्रिरेण एश्वान्महिमान्वजायत, अस्यापरे समुद्रे योनिः । The day is born before the birth of the Aśva, from the eastern ocean. The night is born after him, from the western ocean. (see Rg. C. p. 31).

युजन्ति व्रहमस्त्रं चरन्ते परितस्थुषः रोक्षना दिवि । शु० च २३।४
असौ वा आदिस्यो ब्रह्मोदृष्टः । श० १३।२।६।७ That sun is the Bradhma-Aruṣa—The scarlet coloured great one. (See Rg. C. p. 21).

यद्वातोऽप्येऽगणीयं प्रियमिन्द्रस्य तत्त्वं पूर्तं सोतसेन पथा पुनरद्वम् आवतंयामिनः । शु० च० २३।५

स यः आकाश इन्द्र एष सः । चै० उ० १।२।८ ॥ २ ॥ १।३।२।९
Sky is the Indra.

अथ वदिन्द्रं सर्वे देवास्तस्थानः । श० १।३।३।२२

All the Devas reside in Indra.

Indra as the sky is the abode of the Devas. Hence, the above quotation may be translated as: The Aśva who was

THE RVEDIC CULTURE OF THE PRE-HISTORIC INDUS

called Vâta entered the lovely abode, the self of Indra. By this our hymns he will come back again." Self of the Indra is the sky, here it is the western horizon, where the sun is setting. It is the allegorical representation of the sun-set. This setting of the sun is called its death, e.g. अस्मितः (आदित्य) पूर्वनिधनम् । जे० ड० १११२४

वसव त्वा अस्मन्तु गायत्रेण छन्दसा रुद्रासाम अस्मन्तु त्रिष्टुपेन
छन्दसा आदित्या स्वता अस्मन्तु जागतेन छब्बसा । शु. च० २३ १८।

छन्दांसिकै देविकाः । कौ० १६।७ The Chandahs are Devikâs or wives of Devas. गायत्री वसुणां पत्नी । गो० ड० २१।
Gâyatri is the wife of Vasus. वसुणां वै प्रातः सवनं । शा० ४३।५१।
The morning sacrifice is observed by Vasus.

त्रिष्टुप रुद्राणां पत्नी । गो० ड० २।६ Triśṭup is the wife of Rudras. रुद्रा एकादश कपालेन माध्यान्विने सवने । सै० १।५।१२।३।
The midday service is observed by the Rudras with offerings put in eleven clay utensils.

जगती प्रतीचीदिक् श० ६।२।१।३।०। Jagati is the western horizon जगत्यादित्यनां पत्नी । गो० ड० २।६ Jagati is the wife of Ādityas. आदित्याः तृतीय सवनं । श० १।४।१।१।१।५। The Ādityas observe the third or evening service.

"The Vasus please you by their wife Gâyatri, Rudras by their wife Triśṭup and Aditya's by their wife Jagati. The word Chandah (छन्दः) has double meaning. It may mean the metre as well as the wife. In the Vedic rites, it was the wife of the sacrificer that first of all offered Soma-juice and seat to the solar deity. The above quotations indicate clearly that the Aśva or the solar deity is offered Soma-juice by the wives of Vasu, Rudra and Āditya.

शौरासीत् पूर्वाचिति अथ वासीत् शूद्रद्वय ।
अदिरासीत् विळभिला शक्तिरासीत् पिशङ्किला । शु० च० २३।१२
विष्वम—प्रज्ञा । अवति—गमनकृ । पिष्ठलम्—जल ।

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

कौन्ते शुहि पूर्वचिति—तै० ३।१६।५२ । राजि वैं पिशङ्गिला—तै० ३।१६।५३ यो वैं पिलापिला—तै० ३।१६।५४

The rain is Purvachitti, the Asva is a big bird, the sky is Pilappilâ and night is Pisangilâ.”

वायुस्वा पवमेरव तु असितप्रीवागैर्भव्यग्रोष्वश्चमसैः शास्मणिष्ठृद्वा
एव स्य रात्या वृषा इहमिक्षतुमिः । २३।१३

यो वै वायु स इग्न्ह ।

अथं वै सविता योऽयं (वायु) पवते । शा० १४।२।२९

मेरव—अनि (तन्त्र)

“Ye Vâyu (sun) thou art the destroyer fire, ye are propitiated by the offering of a black-necked goat and the Soma poured from a pot made out of the Nyâgrodha tree, when thou art seated on the Śâlmali (Yupa).

संशीतो इहिमना रथ, संशीतो इहिमना हृथ । संशित अपसुभप्तुजा
सोमपुरगवः । शु० य० २३।१४

रथ—त वा एतं इसं संसं रथ इस्थाचक्षते । गो० पु० २।२१

असौ वा आदित्य एष रथ । शा० १।४।१।१५

शंशित—शंसति—to worship, to adore.

इहिम अथ य कपाल इसेष्टु आसीत इहमयोभवत् । शा० ३।१।२३।
अनिवैं पुरः । शा० १०।३।५।३

“The Ratha (sun) is made beautiful by Raśmi (Soma); the traveller in the sky, the Haya is made beautiful by Raśmi (Soma). The beautiful water-born (sun) enters water after receiving the offering of Soma oblations.”

स्वयं वाजी तन्वं कस्यस्त्वं स्वयं यजस्त्वं स्वयं जुषस्त्वं महिमा ते
द्युधेन न संबन्धो । शु० य० २३।१५

आदित्योवाजी । तै० १।३।६।४ यज्—गमने । शु०—कान्ति कृ ।

“Ye Vâyi (sun) you take form, travel, and give light yourself. None can destroy thy perpetual glory.”

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

नमः उ पश्चिमे न रिष्यसि देवा । ह्रेष्ठि परिभिः सुगोभिः
वद्रासते सुहृतो वत्र यदु लक्ष त्वा देवः सविता दधातुः । शु. य १६।१६

इदा—नव., new. सविता वै देवानां प्रसविता । श० ११।१२।१०

इयं पृथिवी सविता । श० १६।१।४।२

वद्रण पृष्ठ सविता । जै० ड० ४।२७।१

"You do not die (by thy setting) do not harm the devas (by your setting and bringing the night and with it letting loose the ferocious animals and evil spirits). Come again (rise) by the pleasant, and new path. Whatever good have you done, may Deva Savitâ (The earth, the Progenitress of the sun to whose womb the sun enters in the evening) treat you accordingly.

अग्निः पशुरासीत् केनाज्यन्त, स एतम् लोकम् अजयति अग्निना
अग्निः । स तो लोके भविष्यति तं जेष्यसि, पिवेता आपः । वायुः
पशुरासीत् केन अज्यन्त सः एतं लोकम् अजयत् यविन् वायु स
तो लोके भविष्यति, हं जेष्यसि पिवेता आपः । सूर्यं पशुरासीत्
तेन अज्यन्त स एतान् लोकान् अज्यन्त यस्मिन् सूर्यं स ते लोकेभाति तं
जेष्यसि पिवेता आपः । शु० य० २३।१७

पशुः— पश्यतीति पशुः ।

Agni, Vâyu and Surya are the three manifestations of one solar deity. Agni resides in the earth. Vâyu in the interstitial space as lightning and Surya in the heavens as the Sun. By propitiating them and drinking Soma juice all the worlds can be conquered.

प्राणाय स्वाहा, अपानाय स्वाहा, व्यानाय स्वाहा । अम्बे अग्निके,
अम्बालिके, न मा नयति कम्बन । सत्सत्यस्थकं सुभद्रिकां काम्पिष्य
वासिनीं । शु० य० २३।१८

अस्वकं—Small Asva, the fire.

शरद्वा (वर्ष) अस्य (कृद्रव्य) अग्निका स्वसा । तै० १६।१०।४

शरद्वृत्तर पक्ष (संवत्सरस्य) तै० १।१।१।०।४

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

वात्या—वात, आकाश (तन्त्र)। अन्दिका—वात, घट (तन्त्र)। विषाणुं त्वा गणपति इवामहे। प्रिषाणुं त्वा प्रिषपति इवामहे। निर्धीनों त्वा निर्धीपति इवामहे। वसो मम। आहमाजामिगर्भं वसु, आत्पत्तमाजासिगर्भं वसु। शु० य० २३।१९

गर्भं—एष वे गर्भ देवानां य एष (सूर्य) श० १४।१।४।२

तस्मात् पराज्ञो गर्भाः सम्भवन्ते प्रत्यक्षं प्रजापन्ते। ता० १५।४।१६

पुरुषः उ गर्भे। जै० ढ० ३।३।३।४

आजासि—अजनि। अ-जन्—to be born.

गर्भधं—The retainer of *Garva*, the sun, the night.

वाकासकौ शकुन्तिका आहलगिति वज्ञति। आहन्ति गमे पशो विवस्तालिति धारका। शु० य० २३।२२

हुक्—ro go. हर—light. कस्—to go. गम—the light.

विहु॒ शकुन्तिका। श० १३।२।२।६ The man is Śakuntikā.

शकुन्तिका—is the diminutive form of Śakuntala the bird. The sun has been allegorically called a bird. The Śakuntika or small bird is the morning sun.

धारका हू॑ वै शामैवतया हू॑ वै प्रजापति प्रजाधारयाज्ञकार।

श० ११।६।२।१०

माता च से पिता च लेड्ग्रं शूक्रस्य रोहतः। प्रतिलामोति से पिता गमे मुहिं अतंसयत। शु० य० २३।२४

रम्यति—to kill. तसि—to adorn. रुग्म—light.

रादू॑ मुहिं। यश० १३।२४; श० १३।२।१०

शीवै॑ रादू॑। श० ६।७।३।७

सविता रादू॑ राष्ट्रपति। ११।४।२।१४. Savitā or the sun is the Rāstra (Muṣṭi) and the lord of Rāṣṭra (light).

माता—the mother (earth) पिता—the father (the sky),

रद्दमेनमुच्छ्रूपय गिरो शरे हरकित। अवास्ये मञ्जसेषताम शीते वाते पुनर्जिव। शु० य० २३।२६

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

मुर्व॑-ए॒+ह—killed. वात्—to go.

वदस्या अङ्गुभया हुश्चूलमपातसत्। मुक्काविदस्या एजसो गोदारे
क्षकुकावित्। शु. य. २३।२८

मुर्व—हेतने। अङ्गुभि वै विवाति चामानि। वहु० ४।६४

यद्वरिणः यदमत्ति न पुर्वं पशुमन्यते। शुद्र यदवर्यजारः आ न
पोषाय धनायति।

अर्यजार (अर्यजाः)—born of an Arya or Vaisya.

हृहि—water, हर—the heat.

हृहिणः—of the reservoir of water, the sun.

पशु—one that sees, the sun.

यत् यदम् पशुहरिणः (सूर्यं क्षरितं जलं) अति (विवति)।
(तदा) अर्यजारः (अर्यजाः) शुद्र आ न पोषाय धनाय पुर्वं हृति
वहुमन्यते। शु० य० २३।३०

शाहू (सविता) हृहिणः। स० १३।७८

(अस्ति :) एतान् पश्च पशुनपश्यत्। पुरुषमहवं गामाविभज्ञ
यदपशात्समादेते पशादः। शा० ६।२।१।२

गायत्री त्रिष्टुप् जगती अनुष्टुप् पञ्चमा सह। वृहत्यूचित्ता ककूप
सूचीमिः शम्यन्तु त्वा। शु० य० २३।३२

Be thou pacified by hearing the recitation of (the
Vedic hymns in) Gâyatri, Trîstup, Jagati, Anuśtup, Vrihati,
Uṣnik and Kakup metres."

द्विपदा यात्य चतुष्पदा, त्रिपदायाऽच चतुष्पदाः। विच्छन्दा यात्र-सच्छन्दा
सूचीमिः शम्यन्तु त्वा। शु० य० २३।३२

"Be thou pleased by hearing the recitation of the (Vedic
hymns) in metres made of two and four or three and six
lines, well knitted or ill composed."

महानाम्नो रेवस्या विवाताशा प्रभुवरीः मेषो विश्वतो वाचः सूचीमिः
शम्यन्तु त्वा। शु० य० २३।३०

Be thou pleased by hearing the tunes (of the Vedic

THE RGVEDIC CULTURE OF THE PRE-HISTORIC INDUS

hymns) known as Mahâ, Revati, Viśva-āśa, Prâbhupari, Maighi, and Vidyuta."

आर्यं से पहलोः लोम विश्ववर्णु मनीषया । देवानां पहलोः दिकः
सूर्यीभिः शम्बवतु त्वा । शु० ष० २३।१६

"Ye Ārya let thou be pleased by the recitation of the (लोमसाम) Luma-sâm by the wives (of the Yajmâna). Let them please you by reciting (Vedic hymns) from all sides.

भरद्वाजस्य लोम (साम) भवति । ता० १३।११।११

तनु (लोमसाम) दीर्घमत्ताह । ता० १३।११।१२

In this way the Aśvamedha sacrifice was performed and no horse was sacrificed. In the remaining passages the Aśva or the sun's nocturnal state is described and incidently many interesting points raised and answered. But as they are not relevant to our present discussion we leave them to the readers to read them for themselves from the Yayurveda.

INDEX

Abhedānanda, Swāmi 38.
Aditi 1, 18, 19, 35, 36, 54, 196,
107, 108.
Āditya(s) 11, 12, 13, 18, 19, 21, 22,
33, 34, 111.
Afghanistan 2.
Aghora 110, 111.
Agni 1, 10, 19, 21, 32, 33, 34, 35,
46, 59, 63, 64, 105, 106, 110.
Agni Āhvaniya 13.
Ahi 20, 37.
Airāvat 32.
Ājītachakra 114, 115.
Akāśa 111.
Alakānanda 54.
Amṛta 12, 18.
Āñkuśa 54.
Apa 46.
Apāna 10.
Apis Bull. 27
Aphrodite 106.
Araṇī 34.
Archikā 52.
Ardha-Nāriswara 109.
Arghya 38.
Aries 29, 30.
Arka 31, 34.
Aruṇa 14, 21.
Arvā 22.
Ārya(s) 1, 5, 7, 11, 19, 20, 23, 26,
33, 38, 39, 43, 44, 50, 52, 53,
61, 62, 64, 66, 67, 68, 71, 101,
105, 109, 110, 116.
Ārya family 70.
Ārya Bhatta 29.
Āśherim 15.
Asirat 15.
Assyria 15.
Assyrian(s) 15, 75, 104, 118.
Aṣṭami 28.
Astartes 106.
Asura(s) 7, 16, 35, 70, 71.
Āśutoṣa 111.
Āśva 10, 15, 21, 22, 24, 26, 27, 31,
32, 37, 50, 61, 118.
Āśvamedha 16, 23, 26, 28, 30,
32, 40.
Āśvathwa 15.
Āśvaka 24.
Ausur 78.
Babylonia 106.
Bahula 36.
Baji 25.
Birch, Mr. 74.
Bodhi 15.
Brahmāṇi 11.
Brāhmaṇa(s) 8, 9, 10, 11, 12, 15,
16, 18, 19, 20, 21, 31, 33, 34, 35,
36, 39, 110, 111, 112, 119.
Brahmā 72, 73, 76.
Brahma Gupta 30.
Bṛhadāraṇyaka Upaniṣad 9, 11, 24,
31.
Buddhists 15, 43, 113.
Budge, Sir Wallis 69, 74.
Calcutta 2, 3.
Carlyle 64.
Chaitra 28, 80.
Chakora 55, 61.
Chandi 10, 106, 107.
Chandogya Upaniṣad 11, 12, 41, 42.
Chaukhundi Stūpa 119.

Chagala 12, 13.
 Chatustāra 54.
 Chāru 55.
 Chinna 55.
 Chinese 68, 73.
 Cuneiform 68, 71, 75, 76, 103.
 Cybele 106.
 Cyprus 106.
 Dadhikrābā 26.
 Daitya(s) 7, 107.
 Dakṣa 36.
 Daśaratha 16.
 Daita, Bhupendranath 4.
 Dēva(s) 7, 16, 20, 21, 22, 36, 105.
 Devadāru 16.
 Devamadhu 11.
 Dhānyavarṇi 32.
 Dikṣa 43, 44.
 Dīkṣids 118.
 Durgā 106, 107.
 Durgotsav 28..
 Dyavā Pṛthimi 36, 41, 42, 107.
 Dyou 1, 35, 46, 108.
 Ecliptic 29.
 Egypt 15, 19, 20, 27, 71, 72, 77,
 101, 106.
 Egyptian 35, 68, 69, 73, 74, 76,
 104.
 Ethiopic 77.
 Fire 63.
 Gaṇeśa 38.
 Gandharva(s) 36.
 Gangādhara 56.
 Ganges 2.
 Garuḍa 18.
 Garutman 7, 18, 19, 105.
 Gāthika 52.
 Gaya 9.
 Gayatri 8, 9, 10, 36, 38, 103.
 Geological Report 2.
 Gita 115.
 Gotras 7.
 Gouri 37, 57.
 Grahapati 56.
 Greece 106,
 Greek 77, 90, 118.
 Guigens, Joseph De 73.
 Guru 40.
 Harappa 3.
 Havya 18.
 Haya 22.
 Heaven 17.
 Hebrew 77.
 Himālyas 2.
 Hindus 4, 5, 6, 9, 19, 21, 28.
 Hinduism 5.
 Homa 17.
 Hotā 33.
 Houng 106.
 Hring 108, 110.
 Ida 112, 114, 115.
 Indra 1, 7, 8, 12, 18, 21, 32, 37, 38,
 61, 105, 106, 110.
 Indus City 1, 2, 5, 76.
 " Civilization 4, 5,
 " Script 72, 73, 74.
 " Valley 1, 5, 17, 52, 68, 71, 72,
 77.
 Išana 110, 111.
 Isis 71.
 Isthmar 106.
 Jagāti 36.
 Jaṭimāna 111.
 Jehova 118.
 Jews 15.
 Kalaśa 55.
 Kakodari 55.
 Kali 106, 107, 108, 109, 110,
 Kalpa-vṛkṣa 15.
 Kalpa-latika 15.
 Kali-yuga 28.
 Kamalā 54.

Kāmapriya, 54.
 Kāmini, 57.
 Kampilya, 24.
 Kapiñjala, 18.
 Kataka, 13.
 Katamā, 36.
 Katha Upaniṣad, 115.
 Kayā, 36.
 Khadira, 15, 16.
 Khandakhandyaka, 29, 30.
 Khoroṣṭri, 77.
 Kliṅg, 108.
 Krīṅg, 108.
 Kṣirode, 32, 37.
 „ Sagar, 35.
 Kukkuri, 54.
 Kulakundali, 106, 107, 112, 113,
 115.
 Lakṣmi, 32.
 Langdon, Prof., 69, 71, 72, 73.
 Latin, 77.
 Libra, 29.
 Long, 108.
 Lunar, 20.
 Madhu-Naḍi, 11, 12.
 Madhvāchārya, 43.
 Mahābhārata, 24.
 Mahati, 36.
 Mahākāla, 106, 111.
 Mahākāla Vairava, 109, 110.
 Mahārātri, 107
 Mahi, 36.
 Mahidhar, 26, 27.
 Makaradvaja, 55.
 Malabar Coast, 21.
 Mānavaka, 24.
 Maṇḍap, 60.
 Mañjula, 29.
 Manu, 18.
 Manuṣāya(s), 7, 36.
 Mary, Virgin, 107.
 Marshall, Sir John, 3, 5, 52.
 Marut, 1, 7, 12, 46, 63, 64.
 Median, 75.
 Medini, 36.
 Mediterranean, 106.
 Mithra, 41, 50, 105, 106.
 Mohenjo-Daro, 2, 3, 71, 99.
 Mukherjee, Prof. Śreepada, 28.
 Muļādhāra, 113, 115.
 Nara, 22.
 Naradi-Śikṣa, 48, 50.
 Navadvip, 3.
 Nighaṇṭu, 27.
 Nile (River), 19.
 Nirukta, 27.
 Om, 9.
 Osiris, 19, 71.
 Padmapāṇi, 61.
 Palaśa, 15, 16.
 Palin, M. B. Comte de, 73.
 Palm groves, 15.
 Pañini, 47, 99.
 Parjanya, 35.
 Paśu, 33, 112.
 Paśupati, 56.
 Persian, 75.
 Phāl-guṇ (month), 23, 28.
 Phrygiā, 106.
 Piṇḍak, 56.
 Piṅgalā, 113, 114, 115.
 Piṅs, 36.
 Pokeśa, 56.
 Popley, Mr. H. A., 45, 51.
 Prajāpati, 19, 21, 22.
 Pralayāgni, 55.
 Prāṇa, 9, 10.
 Prāṇośini, 111.
 Pr̥thivi, 20, 35, 46, 107, 108, 110.
 Pr̥thudaka, 29.
 Puṣana, 40.
 Purāṇas, 21, 32, 37, 38, 53, 76, 107.

Purohita, 35.
 Puri, Dr. K. N., 68.
 Puruṣa, 19.
 Rakṣasas, 7
 Rāmāyana, 15, 16, 17, 24.
 Rāmanuja, 43.
 Rāmachandra, 23.
 Ramesis, 101.
 Ṛg-Vedic, 13, 18, 19, 20, 21, 35,
 37, 48.
 Ṛkpratiśākhya, 51.
 Romaka, 101.
 Rudra, 10, 12, 34, 37, 109, 110, 111,
 112, 113.
 Rudrāni, 11.
 Sabean, 77.
 Sadāśiva, 106, 109, 110, 111.
 Sādhyas, 12.
 Sadyajāta, 110.
 Sagar, Mahāraj, 32.
 Sahani, Rai Bahadur Dayārām, 68.
 Śakala, 12, 15.
 Śakti, 106, 108, 109, 110.
 Śakunta, 18.
 Śakuntikā, 25.
 Sāma Veda, 48.
 Śambhu, 111.
 Śāmika, 52.
 Saṅgīta Ratnākara, 48, 50, 51.
 Saṅgīta Makaranda, 48, 50, 51.
 Śāṅkhini, 57.
 Saptaka, 52.
 Saramā, 54.
 Sāraṇāth, 119.
 Saraswati, 4, 16.
 Sarpa, 20.
 Sarpa-Deva, 20.
 Sarparājñi R. V., 20.
 Satapatha Brāhmaṇa, 37.
 Savitā, 21, 33, 64.
 Savitṛ, 38, 43, 44.
 Savitri, 8, 9, 11, 36.
 Sāyana, 48.
 Śaṭchakra, 84, 99, 113.
 Sengupta, Probodh Ch., 30
 Sicilian, 118.
 Śiśu, 22.
 Śiva, 37, 56, 106, 108, 109, 110.
 Śivaliṅgas, 111, 112, 113, 115,
 116, 119.
 Śiva Paśupati, 99.
 Skanda, 61.
 Sky-tree, 15, 17.
 Śleṣmatmaka, 16.
 Sri Chaitanya, 43.
 Soma, 1, 6, 7, 8, 9, 10, 12, 13,
 16, 18, 19, 23, 35, 36, 37, 38,
 54, 55, 57, 63, 64, 111.
 Soma Pātra, 79.
 Śudra, 26.
 Śukrāchārya, 7.
 Śumanā, 113, 114, 115.
 Sumerian, 71.
 Sun, 6.
 Suṣumna, 113, 114.
 Suparṇa, 18.
 Sura (S), 36, 106, 109, 110, 111.
 Surataru, 112.
 Svaru, 12, 13.
 Sycamore, 15.
 Śyena, 18, 19, 31, 54.
 Tantra (S), 5, 6, 9, 15, 43, 44,
 45, 46, 47, 51, 52, 53, 64,
 66, 67, 69, 70, 71, 74, 75, 76,
 77, 103, 104, 106, 108, 109,
 111, 112, 115, 120.
 Taut, 15.
 Tambaru, 60.
 Tapana, 55.
 Tarā, 106, 107.
 Tatpuṛuṣa, 110.
 Tripūṭa, 81.

Tripurā, 87, 89.
 Trīśula, 83.
 Tseret Lake, 35.
 Uchaiśravas, 32.
 Uduṃvara, 15.
 Umā, 54, 78, 107.
 Unicorn, 18.
 Upaniṣads, 21, 30, 38.
 Urvi, 36.
 Uṣa, 21, 71.
 Vairabi, 106.
 Vairava, 106.
 Vaiṣṇavi, 11.
 Vāji, 22.
 Vajasaneya, Saṃhitā, 32, 33.
 Vāka, 14.
 Vāma, 110.
 Vāmadeva, 110.
 Vāmana, 10, 118.
 Vanaspatti, 15, 112.
 Vṛṣa, 24.
 Varuṇa, 6, 12, 34, 36, 40, 41, 50,
 55, 65, 106.
 Vāruṇi, 56.
 Vāsanti-Durgotsava, 28, 33.
 Vasītha, 7, 36.
 Vasu (S), 12.
 Vats, M. S., 3.
 Vāyu, 1, 7, 10, 64, 111.
 Vazra, 15, 16, 21, 55, 74, 112.
 Vazra Rupa, 16.
 Vazra-Yupa, 15, 77, 102, 116.
 Veda (S), 5, 6, 9, 15, 21, 35, 36,
 37, 38, 40, 43, 45, 47, 52, 76,
 78, 105, 106, 108, 110, 112,
 115, 118.
 Vilva, 16, 111.
 Virgin, 35.
 Viṣṇu, 10, 37, 64, 110, 112, 118.
 Viṣṇu Chandra, 29.
 Viśvabhuṭṭa, 36.
 Viśvāmitra, 7.
 Vivekānanda, Swāmi, 112.
 Vṝhaspati, 7.
 Vṝṣotsargo, 17.
 Vṝṣava, 17, 18.
 Vyāna, 10.
 Yāgamaṇḍapa, 26.
 Yajmāna, 14, 23.
 Yajña, 36, 40, 59.
 Yaju, 10, 22.
 Yayur-Veda, 13, 22, 27, 34, 35, 36.
 Yudea, 15.
 Yudhiṣṭhira, 23.
 Yoni, 48.
 Yakuts, 15.
 Yupa, 12, 13, 14, 15, 17, 22, 55,
 74, 90, 112, 115, 116, 118.

TRANSLITERATION

ਾ	... A	... as in all	ਤ	... T(h)	hard as in thugee
ਾ	... A	... "	ਾ	... D	... day
ਿ	... I	... in	ਿ	... Dh	...
ੰ	... E	... eat	ੰ	... N	... Punt
ਾ,ਕ	... U	... put	ਾ	... T (soft)	
ਾ,ਾਂ	R(i)	... ritual	ਾ	... T(h) ...	thought
ਲ	L(i)	lit	ਲ	... D(soft)...	though
ਾ	A	at	ਾ	... Dh (soft)	
ੈ	Ai		ੈ	... N	night
ੀ	O	pot	ੀ	... P	
ਾਈ	Oa	goad	ਾਈ	... F	
ਾ	K, Q		ਾ	... B	
ਾ	K(h)	Khan	ਾ	... V	
ਾ	G	god	ਾ	... M	
ਾ	Gh	Ghost	ਾ	... Y	
ਾ	N	Congo	ਰ	... R	
ਚ	C(h)	chat	ਚ	... L	
ਚ	C	circus	ਚ	... S	... shall
ਚ	J	joy	ਚ	... S	... sun
ਚ	Z	Jhelum	ਚ	... S	... should
ਚ	N	punch	ਚ	... H	
ਟ	T	Tell	ਟ	... W	
			ਾ	... X	

